Wildlife Photography

From Snapshots to Great Shots

Laurie Excell

VISIT…

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Production Editor: Becky Winter
Developmental Editor: Anne Marie Walker
Copyeditor: Anne Marie Walker
Proofreader: Patricia Pane
Composition: Danielle Foster
Indexer: James Minkin
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DEDICATION

To my friend and mentor Moose Peterson: Thanks for helping me take my wildlife photography to the next level.

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They say it takes a village to raise a child. It also takes a great editorial staff to help write a book! First off, thanks to my wonderful husband for all the two-minute warnings that dinner was ready while I was writing feverishly, for the late nights I stayed up working rather than snuggling next to you, and for telling me how proud you are of me when I was experiencing writer's block. This book would not have been written if not for my honey's support. Thanks to my editorial team at Peachpit: Thanks Nikki McDonald for the conversations and brainstorming we did that led to this book. Thanks to Anne Marie Walker for your expertise and patience in getting all my i's dotted and my t's crossed, not to mention the grammatical adjustments you did to help the book read clearly and for your gentle nudging to get that next chapter in. Thanks also to Valerie Witte for taking the book to the next step in this mysterious process where I put words on paper and upload a bunch of photos that somehow turn into a beautiful book. Thanks to the rest of the team at Peachpit that does things behind the scenes to get the book to press. Thanks to my beautiful, selfless mother who asked me every day how my book was coming and gave me unbiased (yes, unbiased) critiques when needed. A special thanks to my father for putting my first camera into my hands at a young age and for opening the door to the wonderful world of photography. Thanks to you, the reader, for spending your precious money on this book. I hope you are inspired to take your photography to the next level after reading this book.

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Introduction

Anyone can take a snapshot of a wild animal or bird. It takes observing, patience, practice, perseverance, and most important, time behind the camera along with the right equipment to take your photography to greater heights and make great wildlife shots!

This book begins by illustrating the fact that you don't have to have the biggest and baddest, high-performance cameras and lenses to make great wildlife images. In Chapter 1, I cover equipment basics, from a nice, starter, wildlife kit to high-performance bodies and bazooka-like lenses that enable you to make the in-your-face wildlife images you dream of.

In Chapter 2, I explain the camera settings that I use when photographing wildlife and provide images to illustrate the result of those settings. I then touch on Exposure Triangle in Chapter 3, clarifying aperture, shutter speed, and ISO, and their relationship to each other and to the outcome of your images.

The more you know about your subject, the better you can anticipate its next move and be ready when it happens. Chapter 4 gives you ideas on how to learn more. Once you have the gear, have tweaked the buttons and dials to suit your style of shooting, and know your subject, it's time to get out and shoot.

In Chapter 5, I discuss some of my favorite locations and seasons that give me the best photographic opportunities to photograph my subject of choice.

Moving right along in the progression to becoming the best wildlife photographer you can be, in Chapter 6, I discuss options for safely getting closer to your subject, and in Chapter 7, I cover composing your photographs in a pleasing arrangement so that people pause for just a moment longer while they enjoy your images.

Once you have the basics of wildlife photography down, you are ready to move on to Chapter 8 and go beyond the basics, introducing your own style, likes, and dislikes into your image making.

I wrap up the book by taking you along on two wildlife photo shoots. Chapter 9 takes you on an actual adventure to photograph bears in Alaska, giving you a sense of real-world wildlife photography. Chapter 10 follows in the same vein, but I take you to South Texas to photograph the many species of birds that frequent the area.

So, just turn the page to begin your journey to become a better wildlife photographer.

1

ISO 200
1/350 sec.
f7.1
24–70mm lens

Equipment Essentials

RECOMMENDED EQUIPMENT AND ACCESSORIES FOR THE WILDLIFE PHOTOGRAPHER

Wildlife photography conjures up visions of trekking miles into the wilderness stalking your prey with super telephoto lenses mounted on tripods carried over one shoulder, a second body with a mid-range telephoto zoom over the other, and the rest of the paraphernalia required to be a wildlife photographer strapped to your back or belted around your waist. But wait, you don't have to have the biggest and best camera with the longest lens available to go beyond snapshots and begin making great wildlife shots. Yes, you will be at a distinct advantage with a super telephoto at isolating your subject and capturing in-your-face, frame-filling images. But it is possible to make great shots with more economical equipment, and you can begin close to home, right in your own backyard or at a local park. With careful consideration and wise purchase planning, you can build a system that will gain you entrance into the wonderful world of wildlife photography.

PHOTOGRAPH BY JAMES CROWDER

Mid-range wildlife setup.
Nikon D300s/Canon 7D DX Sensor with
70–200mm 2.8 VR/IS plus 1.4X, 1.7X, and/or
2X teleconverters (not shown) $4,500.00+

Serious wildlife setup.
Nikon D700 Full Frame Sensor with
200–400mm f4 VR plus 1.4X, 1.7X, and/or
2X teleconverters (not shown) $9,500.00+

There is a wildlife photography setup for nearly every budget. Configuring a system to match your photographic style while staying within your means is achievable. By making smart decisions at the outset, you can build your system as your needs, interests, and income grow. I recommend buying the best equipment you can afford; you save money in the long run by preventing frequent equipment upgrades. Count on doubling your investment from the budget setup to the mid-range, and from the mid-range to the serious setup.

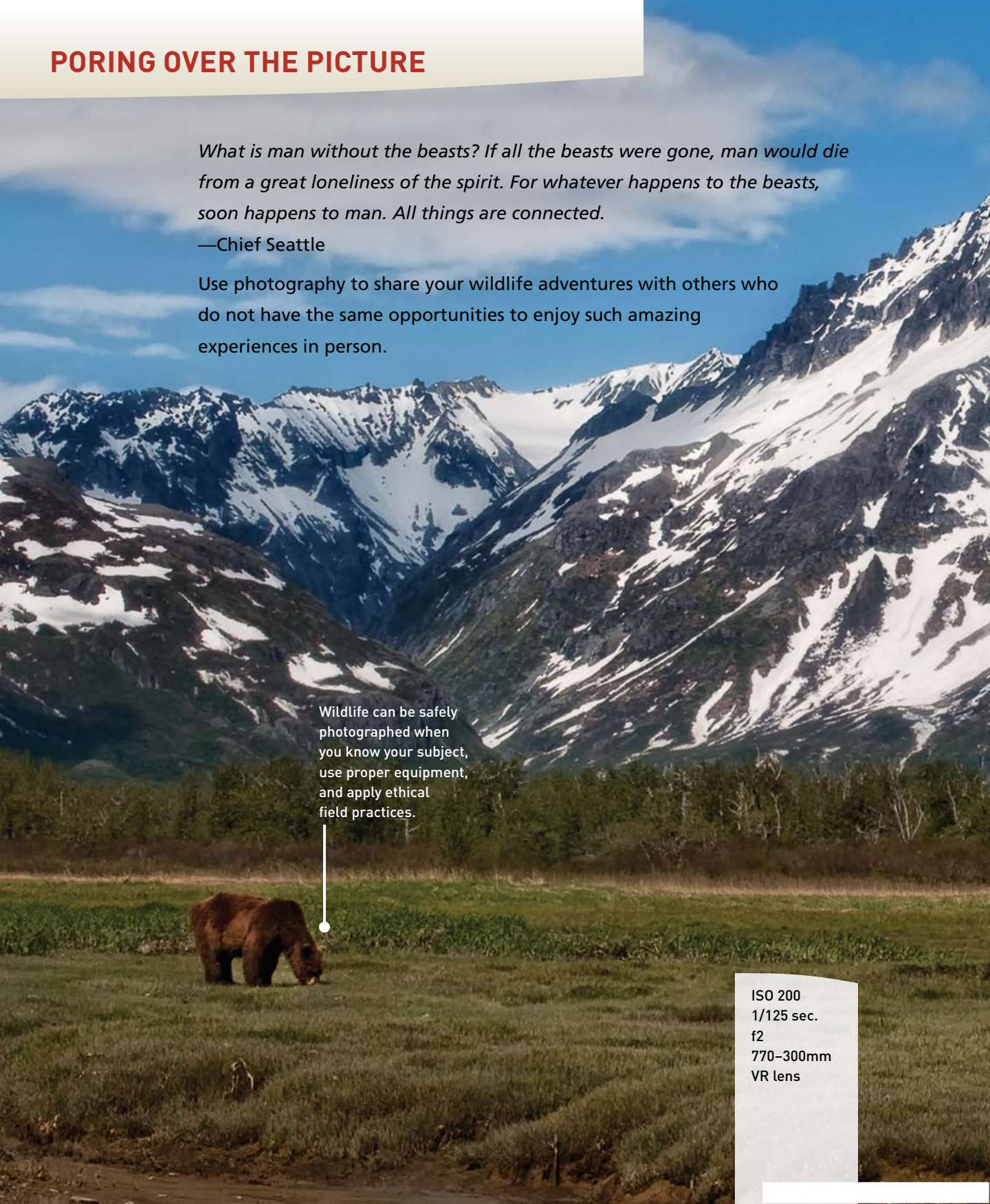
Ultimate wildlife setup.
Nikon D3s Full Frame Sensor/Canon 1D MK IV 1.3X Sensor with 600mm f4 VR/IS plus 1.4X, 1.7X, and/or 2X teleconverters $12,000.00+

Budget wildlife setup.
Nikon D7000 or D300s/Canon 60D or 7D DX Sensor with 28–300mm VR/IS (42mm–450mm) equivalent with 1.5X crop factor $2,500.00+

PORING OVER THE PICTURE

What is man without the beasts? If all the beasts were gone, man would die from a great loneliness of the spirit. For whatever happens to the beasts, soon happens to man. All things are connected.
—Chief Seattle

Use photography to share your wildlife adventures with others who do not have the same opportunities to enjoy such amazing experiences in person.



Wildlife can be safely photographed when you know your subject, use proper equipment, and apply ethical field practices.

ISO 200
1/125 sec.
f2
770–300mm
VR lens

A super telephoto lens not only helps you to fill the frame with your subject, but its narrow angle of view also aids in isolating your subject, making it stand out from the background.
A lightweight, stable tripod with a head that has a smooth range of motion are critical parts of the equation in making tack-sharp images.

CAMERA SELECTION

One of the first questions I ask photographers looking to buy a new camera is, "Do you photograph places you visit, or do you specifically visit locations with photography as the main objective?" The answer helps me to direct buyers towards the right type of camera to suit their needs. A casual photographer can be put off by all the gear a more enthusiastic shooter will carry into the field. It's true that it's the photographer, not the equipment, that makes an image—up to a point. There are flat-out times that having the extra reach is an advantage, because you simply cannot get closer or it is unsafe to do so. Better tripods add extra stability when shooting at slow shutter speeds, and higher-performance cameras can give you an edge when it comes to capturing peak of action. How willing and able are you to carry a big camera and lens for a long distance? Even if you are willing and able, can you afford a more expensive setup? And what are the benefits to be gained by stepping up? You'll need to consider your preferences and the available options when making new camera-buying decisions.

What features should you look for when purchasing your next wildlife camera? What features are you willing to compromise on for the sake of size, weight, cost, and so on? If you are new to DSLR photography, consider brands very carefully. Think ahead to the lenses you would love to have one day (even if you think it's a pipe dream); does the system offer upgraded bodies and lenses? Does it have the accessories suitable to your style of wildlife photography? You don't want to invest in a system and then discover that you've outgrown it down the road and have no upgrade options.

If you're thinking of upgrading your camera, consider your motivation. What is it the newest body offers that yours does not? Do you really need those features? Would your money be better spent on lenses or perhaps a photography trip? How much will you have to spend to acquire a camera with the features you need? Let's look at some of the advantages and disadvantages of the different DSLR formats of similar resolution, as well as examples and additional features to consider when buying a new camera with the goal of photographing wildlife.

FULL FRAME VS. CROPPED SENSOR CAMERAS

In the film days, the image size recorded on 35mm SLR (Single Lens Reflex) cameras was a standard size of 24mm x 36mm. Not so with digital cameras where every camera brand has its own standard sizes. Nikon, for example, has its full-frame (FX) sensors, which are the same image size as 35mm film cameras, and its cropped (DX)

sensors, which are smaller (known as crop factor) and therefore give the effect of having greater magnification. DX sensors are found in Nikon's entry-level to pro-sumer bodies. Canon offers three sensor formats in its line of DSLR bodies: full-frame, 1.3X, and 1.6X depending on the level of body.

When looking for a new camera, I always have a wish list. **Tables 1.1** and **1.2** contain what I consider to be the advantages as well as the disadvantages between FX (full-frame) and DX (cropped) cameras.

TABLE 1.1 FX ADVANTAGES AND DISADVANTAGES

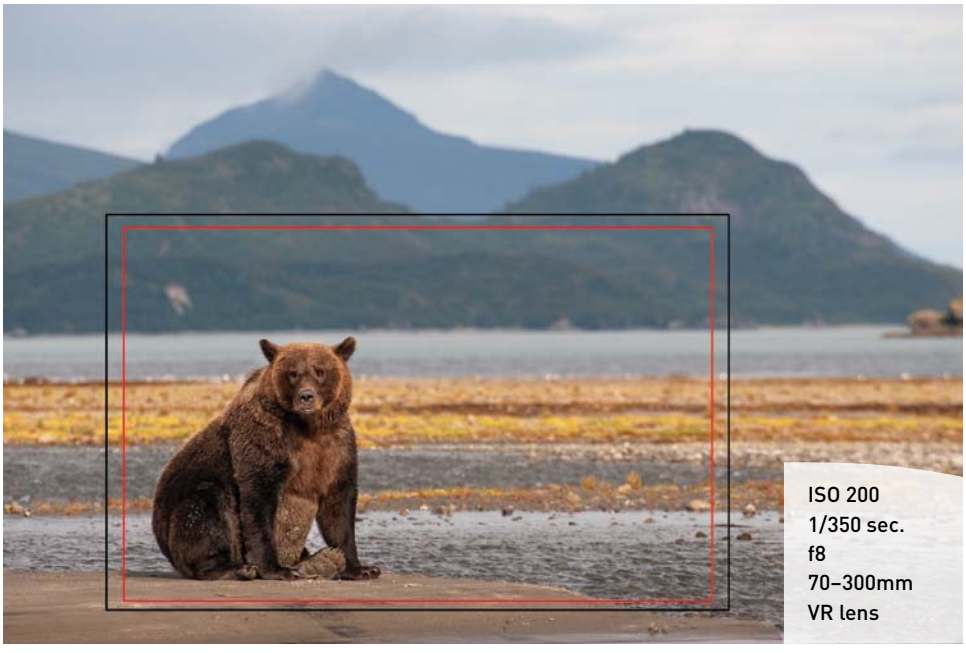
FX ADVANTAGES (D3S)	FX DISADVANTAGES
High performance with up to 9 fps	Size and weight (big and heavy)
Low noise in low light or at high ISO	Cost
Sealed against the elements	
Lenses record at their actual focal length	No 1.5X magnification (crop factor) for increased subject size

TABLE 1.2 DX ADVANTAGES AND DISADVANTAGES

DX ADVANTAGES (D300S)	DX DISADVANTAGES
Good performance at up to 6 fps	Not as high performance as many top-of-the-line bodies
Size and weight	Not as sealed against the elements
Cost	Fewer focus points; slower to acquire focus
1.5X mag (crop factor) for increased subject size	More noise than comparable FX body in low light or at high ISO

Figure 1.1 was captured with a Nikon D700 and a 70–300mm VR lens. The red and black crop lines show what the effective magnification (crop factor) would be with a DX body. (Black is Nikon's 1.5X sensor; red is Canon's 1.6X sensor.)

FIGURE 1.1
Although image size from a DX body is larger in the frame, giving you the feeling of greater magnification, this is achieved by the image being recorded on a smaller sensor that increases the size of your subject in the final image.



A telephoto lens can be used to fill the frame with your subject. Add a DX body with its magnification (crop factor) for even tighter, frame-filling images. **Figure 1.2** was made with a Nikon D3 and a 600mm f4 VR lens.

Sensor size is just one aspect of the many important features to consider when buying a camera to photograph wildlife. Other important features include:

- **Frame rate.** The number of frames per second aid in capturing peak of action. The faster the frame rate, the better when the action is hot and heavy. A fast frame rate gives you the opportunity to capture that defining moment in a flurry of activity.
- **100% viewfinder.** What you see is what you get with the 100% viewfinder. Top-of-the-line cameras have 100% viewfinders, whereas most DX bodies have 95–96% viewfinders, which means that you don't see everything that will be included in your final capture through the viewfinder. I prefer not to crop in order to keep the full resolution of my files and find that having a 100% viewfinder allows me to compose the image and capture it just the way I see it.
- **Resolution.** The resolution should be high-enough quality to satisfy your largest output. The highest resolution is not always the best solution if the compromise is performance when photographing action or higher noise in low light. Even entry-level bodies have excellent resolution to output up to poster size and beyond if the exposure and focus are good.

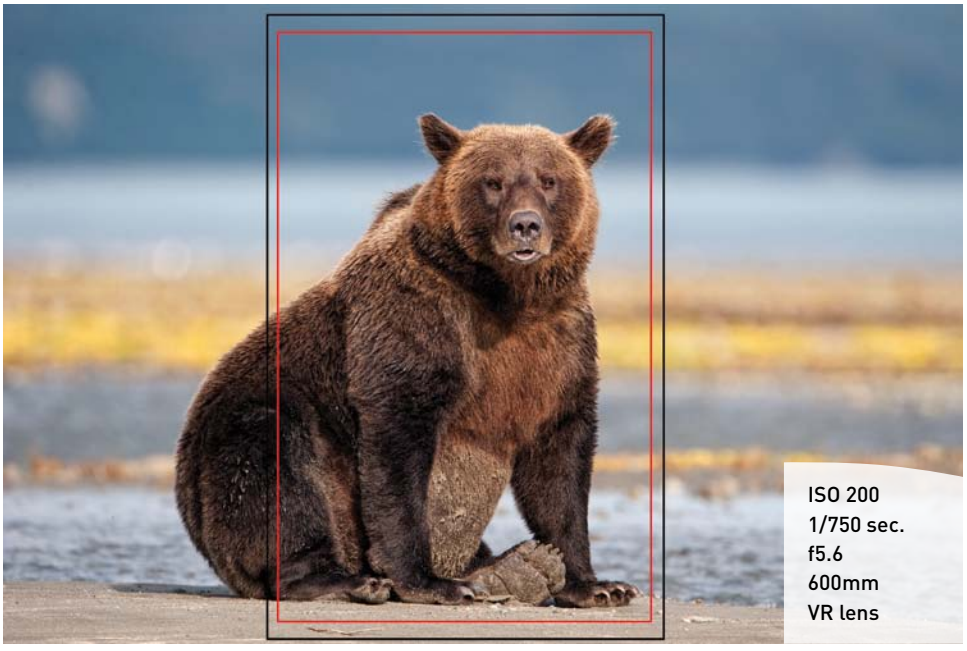


FIGURE 1.2
The black and red crop lines represent what the image size would be with Nikon's 1.5X (black lines) and Canon's 1.6X (red lines) sensor crop factor using a 600mm lens.

- **Low noise.** There is a balancing act that you need to resolve when photographing nature in low light: You'll need a shutter speed fast enough to stop movement but will want low noise for the best image quality. A low-noise body is essential to allow higher ISO settings as needed to stop movement under less than ideal lighting conditions.
- **Cost vs. features.** You'll need to decide how much money you have budgeted for your equipment. Let's face it, photography is not cheap. I recommend buying the best camera and first lens "you can afford"! Make a list of the features you want or need, and then narrow down your search based on cost versus features. Don't get caught up in the latest and greatest just for the sake of having the best with no regard as to whether you will benefit from all the features, quality, and so on. The latest, greatest camera in the world won't do you any good if you spend all your money on equipment and can't afford to go out and photograph.
- **Video.** Many DSLR cameras now include video. The camera you select might have video whether you want it or not. However, if you do want video, be sure to include it in your list of desired features and know which resolution and features are best for the type of video you want to make. Complete books on the subject of making videos with your DSLR are available to help you become a better videographer.

TIP

Can't get all the features you need and want within your budget? Consider buying last year's higher-end body used. Once a new model is released, the previous models drop significantly in price, becoming excellent values. And get this—they are still great cameras, just not the latest and greatest.

LENS SELECTION

The lenses you select are equally, if not more, important than the body for capturing wildlife. In addition to magnification (biggest is best, right? You'll see some excellent images throughout the book that were captured with the affordable 70–300mm VR), you need to consider the speed or maximum aperture (how much light the lens lets in) as well as focus speed (how fast the lens will acquire focus). Does the lens you are considering utilize Vibration Reduction? What do all the other designations on lenses mean, and are they important to your photography? Here, I'll discuss the key features to consider when making your next wildlife lens purchase.

By now you've chosen your camera, so you can make good lens decisions based on the camera format and your future needs. DX lenses work great on DX bodies and give you increased range at affordable prices, but they don't work very well on FX bodies due to the fact that the area of coverage doesn't fit a full-frame sensor: You must go into crop mode in the camera when using DX lenses on FX bodies, which results in a significant loss of resolution (12 megapixels at full sensor size versus 5 megapixels in DX crop mode on a Nikon D3s). If you currently own a DX camera, consider whether your plans include going full frame in the future; if so, determine if there is a better lens choice for both your current and future photographic needs. If you made the decision to stick with a DX body, you can get away with a shorter, less expensive lens, making up for lack of magnification with the smaller DX sensor. The 70–300mm lens is smaller, lighter, and less expensive than the 200–400mm (**Figure 1.3**). The 200–400mm has a third more magnification, a larger maximum aperture at f4, and accepts Nikon's high-quality teleconverters for even greater magnification. See the section "Increasing Focal Length with Teleconverters" later in the chapter in which I discuss teleconverters for potential compatibility issues.

Both the 200–400mm and the 600mm (**Figure 1.4**) have maximum apertures of f4. Size, weight, cost, and versatility are the advantages of the 200–400mm lens. But, when the greatest magnification possible is needed, there is no substitute for having the longest lens you can get.

FIGURE 1.3
A 70–300mm lens (left) and a 200–400mm lens (right).

FIGURE 1.4
A 200–400mm lens (left) and the 600mm lens (right).

CHOOSING A PRIME OR ZOOM LENS

One very important aspect to consider when purchasing a telephoto lens is whether to go with the speed of a prime lens (fixed focal length) or the versatility of a zoom. Is there a zoom available that covers the focal length you are considering? Your shooting style plays a big part in the consideration of a new lens. Can you handhold a 600mm from a bouncing boat? (Believe me, it's tough in even the calmest seas.) A smaller body and lens combination gives you more freedom of motion when shooting handheld than a super telephoto will. Will you be walking great distances or shooting from a nearby vehicle? How close can you get to your subject? The closer you can safely get to your subject, the less magnification you need. Which lens gives you the greatest mobility, versatility, and magnification for your specific shooting needs? Is the wildlife habituated to people? If so, you can often move in a little closer and get frame-filling images with shorter-length telephoto lenses without disturbing

your subject. The image in **Figure 1.5** was captured with a Nikon D3 full-frame body and a 70–300mm VR lens handheld from a boat.

The versatility of a zoom enables you to change focal lengths on the fly as your subject gets closer, preventing clipped wings, cropped feet, and so on. While maintaining focus on a bird's eye, you can turn the zoom ring to pull the focal length back smoothly as the bird approaches, keeping it all in the frame. Having a zoom range from 70–300mm (**Figure 1.6**) enabled me to acquire focus and begin firing at 250mm while the birds were farther away and pull back to the wider-angle end of the zoom as they flew right over my head.

When I have the solid feel of terra firma beneath my feet, I prefer to use a stable tripod with a fluid, gimbal head to do the heavy lifting and panning, allowing me to use my big gun for in-your-face, frame-filling photographs of my subjects. A 600mm not only enables me to compose tighter, but its narrow angle of view gives me greater control of the background and the shallow depth of field makes the subject stand out from the blurred background. Although many people think of a super telephoto for bringing a distant subject up close, I prefer to use it as a means to isolate elements within the frame from a relatively close distance (**Figure 1.7**), which produces tight framing that matches my photographic style.

ADDITIONAL LENS CONSIDERATIONS

Focal length and speed are just a couple of considerations to think about when buying a new lens for wildlife photography. But once you've decided on a focal length range, is there more than one lens choice? If so, what are the differences between the lenses? Additional features to consider when purchasing a new lens include:

- **AF-S/USM.** Silent Wave motors enable quick and quiet focus, and give you the ability to override the autofocus by simply taking control of the focus ring without having to reach for the focus switch. This makes it possible to manually focus on your subject when the camera is having difficulty focusing and still capture the action.
- **VR/IS.** Vibration Reduction or Image Stabilization allows you to handhold up to four stops slower of a shutter speed than would otherwise be possible without it. VR/IS is a great feature when handholding telephoto lenses or when shooting from a moving object like a car or boat. Stabilization significantly helps you to nail that sharp image when the elements are stacked against you.
- **ED/L.** Nikon's Extra Low Dispersion or Canon's Fluorite glass is incorporated into the higher-quality lenses. The manner in which the light travels through the multicoated elements and converges onto the sensor gives a sharper, snappier appearance to an image. The special, multicoated, high-quality optics usually come at a premium price.

ISO 200
1/1500 sec.
f9.5
70–300mm
VR lens

FIGURE 1.5
The lightweight and compact size of the 70–300mm VR lens enabled me to easily handhold and pan with the Black-legged Kittiwakes from a boat as they flew over my head.

ISO 200
1/750 sec.
f9
70–300mm
VR lens

FIGURE 1.6
Proof of the benefits of a zoom range from 70–300mm. A fixed focal-length lens would have limited the number of frames I could make without clipping wings as the bird approached.

FIGURE 1.7
The magnification and narrow angle of view of a 600mm allowed me to fill the frame with the White Ibis as it preened, eliminating the background.

ISO 200
1/500 sec.
f5.6
600mm
VR lens

- **Minimum focus distance.** Just how close will your lens focus? The Nikon 600mm f4 VR has a minimum focus distance of 15.7 feet, whereas the Nikon 200–400mm f4 VR can focus as close as 6.6 feet. Although you may not have much choice over minimum focus distance and lens selection, it's good to know up front just how close your new lens will focus. You can make up for lack of magnification if you can move in closer to your subject.

TIP

Don't treat your lens purchase lightly. A good lens is a lasting investment compared to a camera body that becomes obsolete every 18–24 months. Purchased wisely, the right lens will last you for years to come.

INCREASING FOCAL LENGTH WITH TELECONVERTERS

When even greater reach is needed to bring the subject to the desired size in the frame, teleconverters are available from manufacturers that match up with their high-end long lenses for increased magnification. It's an inexpensive way to increase your focal length. But the cost is loss of light, beginning with a one-stop loss of light with a 1.4X, a one-and-a-half stop loss with a 1.7X, and two full stops of light lost with a 2X teleconverter. Your camera adjusts for the change of exposure automatically. Nikon and Canon's teleconverters are designed to work with their longest and fastest lenses. Refer to your instruction manual to see which teleconverters are compatible with your camera/lens combination. **Figure 1.8** shows Nikon's teleconverters.

A small, shy subject needs all the magnification you can get so you can keep your distance and yet still get a sizeable image in the frame. The 600mm f4 with a 2X teleconverter becomes a 1200mm f8 super telephoto (**Figure 1.9**).

FIGURE 1.8
From left to right, Nikon's TC-14E II, TC-17E II, and TC-20E III.

FIGURE 1.9
Manual focus was used due to the two-stop loss of light, giving a maximum aperture of f8.

THE FUNCTION OF TELECONVERTERS

Cameras need plenty of light to see to focus, just like you do. The max aperture that a camera can still see through well enough to focus at its peak performance is 5.6. If a lens's max aperture becomes smaller than f5.6 with the addition of a teleconverter, focus will slow down noticeably or quit working entirely. So although Nikon and Canon teleconverters work on all their high-end long glass, you'll sacrifice speed for increased magnification. For example, using a 600mm f4 lens with a 1.4X teleconverter becomes 840mm f5.6. Focus is still at its maximum capability. With a 1.7X, focus becomes 1020mm f6.7. (Note that at f6.7, focus begins to act sluggish.) With a 2X, the total focal length is 1200mm with a maximum aperture of f8, providing any autofocus at all in only the brightest light, and it is sluggish at best. Manual focus is preferred with a 2X attached to a long lens with a max aperture of f4.

TO FLASH OR NOT TO FLASH

Although I don't often use flash in the field, preferring natural light in most cases, there are times when adding a little fill light simply makes all the difference between a snapshot and a great shot. Flash will remove a color cast caused by the light conditions, bringing out the true colors of your subject, as well as add a catchlight to your subject's eyes. One case in point was when I was trying to photograph a Great Horned Owl in an Australian pine at Fort De Soto in Florida. He was perched high among the branches with a bright sky behind him that backlit him and made him appear too dark. I could have added plus exposure compensation, but it would have brightened the background as well as the owl. So, I reached into my bag and pulled out my SB-900 with the Better Beamer flash extender (**Figure 1.10**). I didn't want to have a "flashed" look to the image but rather wanted to pop just a little fill light onto the owl to bring out its feather detail and make its eyes stand out. I slid the flash onto my Wimberley flash bracket, attached the TTL flash cord, and dialed in minus output settings on the flash until I got the desired effect at minus 1.3. The result was a natural-looking image that draws your attention to the owl. When shopping for a flash, it is important to get one with plenty of power and the ability to control the output. The two photos in **Figure 1.11** show the difference between natural light and fill flash.

TIP

If I will be using flash extensively in continuous firing mode, I'll add an external power pack to enable the flash to recycle faster and give me more flashes between recharges.

FIGURE 1.10
The Better Beamer uses a Fresnel to concentrate the light to a narrow beam, giving it greater reach with a spot effect to illuminate just your subject. By concentrating the light, the output may not be as much of a drain on the batteries.

TIP

The TTL (through the lens) tends to do too good of a job at matching the fill light with the ambient light. I prefer the moodiness of just a hint of flash fill, so I usually dial down the flash to minus output.

FIGURE 1.11

Exposing to get an average of the bright background and the darker, backlit owl resulted in an exposure that was too dark for the owl (left). Dialing in plus exposure compensation would have resulted in an even brighter background that would draw attention away from the owl. Leaving the ambient light as it was and using Nikon's Creative Light System to get the base exposure, I dialed down (minus) the flash power, adding just enough fill light to brighten the owl (right) and make its eyes pop with catchlights and color.

FIGURE 1.12
A tripod is an investment in your equipment's safety as well as all the future sharp images you will make when using a tripod properly. You don't have to break the bank to get good quality, as proven with the Flashpoint brand of tripods and heads.

UTILIZING TRIPODS AND HEADS

For improved image quality, I am a firm believer of tripod use. I realize there are times that in order to even get the shot, you need to be extremely mobile and a tripod is not an option, or that some locations forbid the use of tripods. But for those times when you can set up a tripod and utilize it for support, you will find a noticeable improvement in your images. In my experience, a tripod is invaluable in not only aiding me in making sharp images, but it allows me to shoot for hours without becoming fatigued from handholding a heavy camera and lens. A stable tripod combined with a fluid gimbal head allows me to pan smoothly along with a moving subject, enabling me to capture tack-sharp images during peak action. A stable support is worth its weight in gold. Just like camera bodies and lenses, there are tripods and heads for every type of photography and every budget. You have a lot of money invested in your equipment, so purchasing a tripod is not the time to become too budget conscious. A good tripod will serve you well for years. Flashpoint tripods and heads (**Figure 1.12**) are excellent options for the budget-minded photographer with a good selection to match the tripod and head with the equipment you own.

Important features to consider when purchasing a new tripod include:

- **Maximum extended height (preferably without a center column).** You'll want a tripod that will extend to at least your full height. This will prevent fatigue from bending over your tripod all day and avoid tilted horizons from bending over at an angle to look through the viewfinder. If you can stand at ease with your tripod at eye level, you will be able to shoot in a more relaxed fashion for a greater length of time.

- **Maximum weight.** You'll want a sturdy tripod that can support at least twice the weight you'll ever mount on it. Not only does the additional weight of the tripod add to its stability in windy conditions, but you'll have room to grow and add longer lenses without the need to upgrade. The compromise is worth the little bit of extra weight for the added stability. I use the Gitzo line of carbon fiber tripods for their light weight and strong support.
- **Minimum collapsed length.** If you travel, your tripod needs to fit in your suitcase for transport. Many Gitzo models come in three- and four-section options. The three-section extension does not extend as high nor does it collapse as short as the four-section version, but it does have slightly larger legs without the fourth leg extension. The four-section extension version extends higher for taller people and collapses shorter for easy transport.
- **Center columns.** It is tempting to use a center column when you have it, but it degrades the stability of your tripod with only its single column supporting your camera. It also prevents you from dropping right to the ground for eye-level shots of small shorebirds and other low-to-the-ground subjects.
- **Lightweight and solid construction.** Tripods made from carbon fiber and other lightweight materials are considerably easier to carry into the field. In addition, they offer great strength and stability.
- **Overall weight.** If you photograph in the field, you must be willing and able to carry your tripod. Determine the greatest distance you may venture from your car, and keep that in mind when you're checking the weight of a tripod you are considering.
- **Cost vs. long-term use.** Your tripod will last you a lifetime if you purchase it with care and consideration for future additions to your system. There may come a time when you need two tripods, one for lightweight shooting where you won't be mounting your biggest lenses and another for your big gun to provide maximum support.

Two types of heads to consider when purchasing a new head include:

- **Ballhead.** A ballhead gives you the greatest ease of use: One knob releases it to move in all directions and another knob is used for panning. It's that simple. What's not so simple is finding the right ballhead for you. One issue with lesser-priced ballheads is drift, which means the head shifts slightly after tightening it. A head that doesn't drift comes at a higher price but is well worth it. The Really Right Stuff ballheads (**Figure 1.13**) are the best I've used to date. While you're at it, don't forget to add an L-Bracket (quick release) to your camera (**Figure 1.14**). An L-Bracket allows you to mount the camera in a vertical position and keep it positioned over the center of the tripod for the greatest stability.

FIGURE 1.13
The Really Right Stuff ballhead offers smooth operation and can be adjusted with one knob for convenience and speed.

FIGURE 1.14
An L-Bracket from Really Right Stuff allows the camera to be turned to a vertical position and still balance the weight over the center of the tripod for the greatest stability.

- **Gimbal head.** A gimbal head is the preferred head for wildlife photographers who use long lenses. The operation of a good gimbal head is as smooth as it gets. The lens simply glides from left to right and up and down. With the lens collar loosened, there is no direction you can't turn to follow your subject quickly, smoothly, and easily. Quality and convenience come at a price, and this is no spontaneous purchase item. But for those who do own long lenses and photograph moving subjects, it's well worth the investment. Wimberley (**Figure 1.15**) and Really Right Stuff offer well-made, high-performance gimbal heads, and both accept the "Arca Swiss" style quick-release plates for ease and speed of mounting your lenses to the head.

TIP

Carbon fiber tripods are not only lightweight and stable, they don't transmit the cold like aluminum tripods, which is a real bonus for those who photograph in freezing temperatures.

FIGURE 1.15
A Wimberley gimbal head is the ideal platform when using lenses that have their own tripod collar. The smooth operation allows for easy panning with a moving subject.

BUYING COMPACTFLASH CARDS

Buy the biggest and fastest cards your camera can use and you can afford. They will not only write at your camera's fastest capability, they will download into your computer as fast as your drive will transmit. You can never have too much speed or too much storage in the digital world. I always tell my participants to bring as much storage as they can. They are often surprised at just how much they do shoot and are glad that they heeded my advice. Memory and storage are cheap compared to all the money you have invested in your equipment and the expense to travel to a location. I rely on my cards to capture images and store them safely until I can download and back up the images. That's why I only use name-brand cards. Your camera may take CompactFlash (CF) cards (**Figure 1.16**), SD media, or some other format. Make sure you know the correct size and buy extras! Cards are inexpensive, and your memories are priceless! My father instilled in me a long time ago that film is cheap in comparison to the expense of returning to a location. Not only that, but there will never be another right now! So, when you see that special shot, don't think that you can come back. It will never be exactly the same.

NOTE

Rob Galbraith has done extensive testing and research on the best cards and their performance as well as reliability. You can read about it at www.robgalbraith.com.

FIGURE 1.16
Compact Flash cards come in a variety of capacities and speed. By buying the biggest and fastest cards, I can shoot hundreds of images to one card without having to change at the peak of action, and the download time is reduced for a more efficient workflow.

TIP

Even the best cards can fail. The best $29 you will ever spend is on PhotoRescue software from DataRescue (www.datarescue.com). If you ever need to salvage deleted images from a card, it's PhotoRescue to the rescue!

BACKPACKS AND FANNY PACKS

There are as many types of bags to get your equipment to and from location and into the field as there is equipment to fill them. Those who venture off the beaten path use backpacks and fanny packs. Because I travel from one end of North America to the other on a regular basis, I need a bag that will not only work in the field, but one that I can also carry on an airplane. Nowadays, you must consider the type of bag that you can use in the field as well as the logistics of getting your equipment to location by air, bus, car, boat, and so on. And let me tell you that it's not getting any easier because of size and weight restrictions, and baggage charges. It's getting progressively harder to even bring your camera bag onboard a plane anymore. That's why I use the backpacks that I do. They range from a Moose Peterson MP-1 to the MP-3 or MP-7 (**Figure 1.17**), depending on the equipment I'm bringing with me. They

will fit in even the smallest overhead compartment on small commuter jets. I simply state with confidence that the bag will fit. If I get questioned, I ask if I can at least try and offer to relinquish it if it won't fit, all the while knowing that it will fit! I've not been refused yet.

In the field it's essential to have your hands free to carry your long lens and tripod, and to be ready to set it down and start shooting at a moment's notice without being hindered by extra gear getting in the way. I prefer a backpack in the field because it evenly distributes the weight on my shoulders, allowing me to go for hours with fairly significant weight packed in it. On shorter forays, I carry a small fanny pack (**Figure 1.18**) with extra batteries, cards, lens cleaning supplies, a teleconverter, and other small miscellaneous items.

FIGURE 1.17

Venturing farther afield and needing more gear, such as a second body with a mid-range zoom, wide and macro lenses for capturing the landscape from intimate detail to sweeping panoramas, teleconverters, cards, batteries, gloves, and assorted odds and ends, requires a larger backpack to hold everything and distribute the weight evenly on my shoulders. (An AquaTech rain cover protects the camera and lens against the elements.)

FIGURE 1.18
When my primary focus is wildlife, I will carry my longest lens mounted on my tripod with teleconverters, a wide-angle lens, spare batteries, CF cards, and other small miscellaneous items in a fanny pack to free up my hands.

ISO 200
1/350 sec.
f8
70-300mm
VR lens

CREATIVE FILTERS

Although you can replicate nearly every filter imaginable in the digital darkroom, I prefer to get the effect or look I'm after as close as possible in-camera. Rather than "fixing" something I could have corrected in-camera, I can use my time in the digital darkroom for creative endeavors. Also, some effects are just not the same, no matter how skilled and creative you are in Adobe® Photoshop®. One of my favorite effects is the blur pan (this technique is also discussed later in the book): You shoot at slow shutter speeds while panning with a moving subject, such as a bird in flight. When the light is low, I can achieve a slow shutter speed at my lowest ISO and smallest aperture. But when the light is strong and I want to work with blur pans, I simply turn to my Singh-Ray Vari-ND (**Figure 1.19**) with its 2–8 stop range of neutral density strength (for lenses up to 77mm thread) or my Hoya HMC ND8X that threads into my drop-in filter holder on long lenses (52mm slim is needed to fit into the drop-in slot on a super telephoto lens).

FIGURE 1.19
The Singh-Ray Vari-ND is a two-ring filter; you turn the outer ring to vary the strength of the neutral density filter from 2 to 8 stops. Getting the exposure is easy with digital: Simply dial it down until you reach the desired slow shutter speed, take a test shot, adjust the exposure using exposure compensation until you have the desired effect, and fire away.

There is a romantic feel to a well-done blur pan when you keep the eye sharp and the rest of the subject and surrounding background softly blurred by using a slow shutter speed. Bosque del Apache in Socorro, New Mexico, is an excellent location to practice this technique if you go during the winter months. At that time, nearly 10,000 sandhill cranes and 35,000–40,000 snow geese winter over, providing opportunities to practice panning. Each morning the cranes and geese leave the shallow ponds for the cornfields where they spend the day eating and then return in the evening to roost in the ponds once again. With my ISO at its lowest setting and my aperture closed down to its smallest opening, I may still need some help to get a shutter speed slow enough for the blur effect I want. By adding a neutral density filter, I am able to slow down the shutter speed enough to achieve a blur pan and can select an aperture that gives me the limited depth of field I want without having to close down the aperture (**Figure 1.20**).

FIGURE 1.20
The blurred effect of the sandhill crane in flight is achieved by adding a neutral density filter to the lens to slow down the shutter speed while keeping the aperture open a bit for less depth of field.

TIP

Your keeper ratio decreases dramatically when working with blur pans, but all it takes is one or two great shots to consider the reward worth the effort. So, don't despair if you don't get it right away.

Additional filters that I carry with me in the field for protection and creative control over my images include:

- **UV filter.** My lenses are exposed to some pretty harsh conditions, such as extreme temps, sea spray, blowing sand at the coast, dust and dirt in the field, steam from thermal features in Yellowstone, and so on. I feel strongly about protecting my front elements against environments that can ruin the coatings.

TIP

When adding a filter for creative effect, I remove the UV filter to avoid shooting through multiple filters, which can degrade the image as well as cause vignetting (dark areas in the four corners of your image) with wider-angle lenses.

- **Polarizer.** Not only does a polarizer darken the sky and make the clouds stand out, it removes reflection, cutting through glare and coaxing the natural, beautiful colors out from behind the reflection.

TIP

A polarizer can help when you need a slower shutter speed. It will reduce the exposure by up to two stops. It can also take the shutter speed too low for sharp images when you simply want to remove reflection. I use a polarizing filter sparingly when photographing wildlife.

- **Graduated ND.** When the exposure range is greater than your camera can capture in one click, a graduated ND filter works to compact the exposure between the foreground and sky. I use a Lee graduated ND 3-stop soft filter and hold it in front of the lens by hand. A fairly straight line between the bright and dark areas is necessary to make a natural transition. This filter is useful for landscapes as well as environmental wildlife photography.

- **Canon 500D Close-up lens.** When macro is not the primary focus of a shoot, I may leave my macro lens at home, but I always carry a Canon 77mm 500D Close-up lens that threads onto the front of both my 24–120mm VR and 70–200mm 2.8 VR. The 500D is a two-element, close-up filter that has fairly low distortion and enables me to focus closer than my lenses' minimum focus distance, allowing me to capture close-ups in nature. The 500D comes in a variety of sizes and strengths to accommodate most lenses regardless of the brand you shoot.

PROTECTIVE COVERINGS

One of the first items you should invest in if you buy a new long lens is a LensCoat protective neoprene cover (**Figure 1.21**). LensCoat covers will help protect your investment against bumps, bangs, dings, and to some degree weather. If you take good care of your equipment, it will continue to work hard for you.

FIGURE 1.21
The LensCoat long-lens cover protects lenses from getting banged up in the field, keeping them working and looking good.

CAMERA CLEANING KIT

It's important to keep your sensor clean and free of particles. At best, it can take extra time to clean up images in the digital darkroom, and at worst, you will end up with a spot on a hard-to-remove area. Every night after a day's shoot, I clean my camera and check the sensor to ensure that it is free of any debris that might appear on my images. If you are in the field and are changing lenses, you will get dust on your sensor; so, having a cleaning kit along is essential. I use the Visible Dust products for their innovative designs, quality, and the fact that their liquids are not flammable. As a result, the TSA will not confiscate them and leave me a nastygram in my suitcase and no cleaning fluid on location.

The items included in my cleaning kit (**Figure 1.22**) consist of:

- A man's shaving brush to remove surface debris and dust from the outer part of my camera and lenses
- Visible Dust Sensor Loupe to get a magnified view of the sensor while checking for dust
- Zeeion Blower to "blow" dust off the sensor as needed
- Arctic Butterfly with light to "brush" dust that the blower didn't remove from the sensor
- Visible Dust Sensor Swabs and Sensor Clean fluid to remove those pesky specks that won't blow or brush off

FIGURE 1.22
I always carry my cleaning kit with me on my travels to keep my camera and sensor in tip-top, clean condition.

- Q-tips, lens-cleaning solution, a microfiber cloth, and an Absorber (car chamois)
- I use the Q-tips with a little bit of lens-cleaning fluid to clean tight places and the contacts of my camera and lens, and the Absorber to remove surface grime from my camera and lenses.

TIP

Yours truly has a step-by-step tutorial on sensor cleaning and camera maintenance at Kelby Training. Check it out at www.kelbytraining.com.

FLASHLIGHT/HEADLAMP

As a wildlife or nature photographer, you'll usually be in the field well before first light and be the last to leave after the sun has set, assuming you are not staying out for night photography as well. Therefore, to light the way to your destination as well as to check your camera settings in the dark, be sure to use a flashlight or a headlamp in the field (**Figure 1.23**). A headlamp frees up your hands to work the camera while illuminating the buttons and dials.

TIP

Most cameras have an illuminated display to help you see the settings, but a flashlight is useful for finding the buttons and dials in the dark.

FIGURE 1.23
A Streamlight flashlight is bright enough to "paint with light" in addition to aiding you in seeing your camera settings in the dark. A headlamp frees up your hands to work the camera while lighting the buttons and dials.

Chapter Assignments

Now that you have all your gear, the following assignments will help you become more familiar with your equipment and accessories.

Get to Know Your Equipment

Take time to get to know your equipment. Set up your tripod and focus on the same subject. Shoot each of your lenses at their widest angle and then their longest focal length. Move in to minimum focus distance to see just how close you can get to your subject with each lens. Try filling the frame with your subject using different focal lengths to better visualize the difference between moving in tight with a shorter lens as opposed to staying back a bit with a longer lens.

Take Inventory Now So You Have the Right Equipment on Location

Go through your bag to make sure you have all the items you might need in the field. Do you have quick-release plates for your cameras and lenses with tripod collars that fit your tripod head? Do all your lenses have protective UV filters? Do you have enough media to get through an entire day's shoot? With a little planning before you leave for a shoot, you won't have any unpleasant surprises when you arrive on location in some remote area and find you are missing a key accessory or part.

Go Ahead, Clean That Sensor

Many people break out in a nervous sweat when they think about cleaning their camera's sensor. Relax; it's not that hard. If you don't have a basic cleaning kit, now is the time to invest in one, so that when you are on location, you don't end up with a dust storm on your sensor that shows up in your photos. It's not realistic to think that you will never get dust on your sensor. Be prepared!

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/composition_fromsnapshotstogreatshots.

2
MODE
QUAL
WB
ISO
AE-L
AF-L
AF-ON
MENU
OK
Image quality
NEF (RAW) + JPEG fine
NEF (RAW) + JPEG normal
NEF (RAW) + JPEG basic
NEF (RAW)
TIFF (RGB)
JPEG fine
JPEG normal
JPEG basic
Nikon

Camera Settings and Shooting Techniques

GETTING IT RIGHT IN THE CAMERA IS THE FIRST STEP TO MAKING GREAT SHOTS

With patience, persistence, and practice, wildlife photography can be a rewarding endeavor. You'll encounter long periods of waiting and brief bursts of action. Being on top of your game makes the difference between getting the shot or not. Taking the time to learn the buttons and dials of your camera and optimizing it for wildlife photography is an important step to making great shots. Instinctively knowing where the buttons and dials are allows you to make changes quickly, capturing peak of action. Practicing proper shooting techniques will enable you to capture sharp images whether you are handholding your camera or photographing from a tripod. The time to learn your camera's settings is now, not in the field. When the action is hot and heavy, you don't want to be fumbling with the buttons and dials on your camera and miss a great shot.

PORING OVER THE PICTURE

3D Matrix metering took care of the exposure while I concentrated on capturing the action.

We watched from the shore as the drama of two bears pursuing a sow unfolded on the mudflats. When the boars got too close, the sow would take off running, spraying water and mud in her wake. Understanding my camera's buttons and dials and having the skills to track a moving subject enabled me to capture a wonderful sequence of images.

Proper long lens technique allowed me to smoothly pan with the moving bear.

Continuous Dynamic auto focus tracked the bear's eye, keeping the focus where I wanted as the bear ran.
ISO 800
1/350 sec.
f5.6
500mm lens with 1.4X teleconverter
Continuous advance allowed me to fire off a burst of images to capture peak of action.

PORING OVER THE PICTURE

Photographing from a moving boat introduces several challenges that if not met, can impair the quality of my images. Knowing my camera's capabilities and using proper handholding technique enabled me to make the appropriate adjustments and capture sharp images of a harbor seal with her young pup.

With the Highlight warning enabled on my camera, I was able to check for blown-out highlights on the young seal and quickly make appropriate adjustments.

ISO 800
1/180 sec.
f5.6
500mm lens with a 1.4X teleconverter

Using the AF-ON button to lock focus, I was able to keep the seals sharp as the boat bounced in the swells.
A high ISO was needed to make sharp images hand-held from a moving boat.

CAMERA SETTINGS

Now that you have your digital camera, have taken it out of the box for the first time, and have really looked at it, you'll find more buttons, dials, and menus than you'll know what to do with. Do you just turn on the camera and start shooting, or do you sit down with the instruction manual and try to interpret what seems to be a foreign language? How do you get from snapshots to those great shots you see in coffee table books and magazines? By taking the time to go over the settings your specific camera offers and getting to know those that are useful to your photography style, you can get started in the wonderful world of wildlife photography and expect to make some excellent images.

NOTE

Many cameras offer the settings discussed in the "Camera Settings" section. Refer to your camera's instruction manual to determine if it offers these settings and how to adjust them.

RAW VS. JPEG

Like many photographers just getting into digital photography, I began my digital photography shooting in the JPEG format. It seemed the best choice for a photographer who used to shoot slide film; what you saw in the final image was what you shot. Tweaking the exposure, the white balance, and so on was not an option with film, so why would I start fiddling with those settings when shooting digital? JPEG seemed to be the answer because it took all the camera settings I had dialed in and processed the image at the point of capture. All I had to do was download the images, edit them, and enjoy my successes—well, at the expense of some loss of quality due to the compression process while saving a JPEG file.

As time went on, I kept hearing about RAW and how it gives a photographer much more control over the end result, not only at the point of capture, but throughout the finishing process as well. With RAW files, I would have more image data to work with and could actually makes changes to some camera settings before "processing" the image.

So, which format should you choose? Do you want the creative control of finishing your images in the digital darkroom? Do you need the greatest image quality and size for large output? Are your images used primarily on the Web and in emails? How much postprocessing are you willing and able to do on your images?

NOTE

Some cameras will shoot both RAW + JPEG, giving you the best of both worlds at the small cost of needing greater storage capacity.

Tables 2.1 and **2.2** compare the advantages and disadvantages of shooting in RAW and JPEG formats, respectively.

TABLE 2.1 RAW ADVANTAGES AND DISADVANTAGES

RAW ADVANTAGES	RAW DISADVANTAGES
High bit depth for the greatest color and resolution	Large file sizes that require a high-performance computer and greater storage capacity
Unprocessed files allow you to "tweak" them before processing with little to no loss of quality	Processing is required to show the image at its best
Higher dynamic range (ability to display highlights and shadows)	Images appear flatter and less sharp, requiring processing to bring them to life
Uncompressed files (a 12-megapixel camera produces a 12 MB RAW file)	

TABLE 2.2 JPEG ADVANTAGES AND DISADVANTAGES

JPEG ADVANTAGES	JPEG DISADVANTAGES
A standard file format readable by most image programs	Small file sizes, less image data
Image processed in-camera	Less control over final image quality in postprocessing
Compressed files take up less space on a drive	Files are compressed with some data discarded
Processed and ready to print, email, etc. right from the camera	

FIGURE 2.1
The RAW format can be found in the Shooting menu under Image quality on most cameras.

FIGURE 2.2
Bit depth is found in the Shooting menu (under RAW recording on Nikon DSLR cameras) and is adjustable when the RAW format is selected.

Located in the Shooting menu, you can select from several JPEG formats (basic, normal, and fine), RAW, or RAW + JPEG (**Figure 2.1**). Additionally, you can set the bit depth (**Figure 2.2**) (the greater the bit depth, the greater the file size and more information) and the amount, if any, of compression (**Figure 2.3**).

FIGURE 2.3
Compression options are found in the Shooting menu (under RAW recording on Nikon DSLR cameras) and are adjustable when the RAW format is selected.

APERTURE PRIORITY

My camera's exposure mode is normally set to Aperture Priority, which gives me the greatest control over the way my image will look. By simply turning the Aperture dial, I can control just how much (**Figure 2.4**) or how little (**Figure 2.5**) of the image is in sharp focus. And, as a result of the Aperture I select, I can also control whether I capture stop action (**Figure 2.6**) or blur motion (**Figure 2.7**) in my images.

FIGURE 2.4
Great depth of field includes both the subject and background in focus.

FIGURE 2.5
Shallow depth of field makes the subject stand out from the blurred background.

FIGURE 2.6
A stop-action shutter speed; a direct result of the aperture I selected.

FIGURE 2.7
A blur-motion shutter speed; a direct result of the aperture I selected.

NOTE

More on the aperture and its roll in depth of field and shutter speed in Chapter 3, "Exposure Simplified." More on exposure in Chapter 3.

MATRIX METERING

I typically use 3D Matrix metering (evaluative on Canon cameras) for its ability to quickly and correctly evaluate a scene. Nikon cameras divide the scene into segments (420 or 1005 individual segments depending on your camera model). The camera then meters each segment individually, comparing highlights and shadows, contrast, color, and even subject distance from the camera based on the selected focus point. The camera then processes the information and compares the data to tens of thousands of known situations and gives me a base exposure based on my camera's settings. As long as the exposure range is not greater than my sensor can render, I will get a good exposure. When the light is contrasty, the camera gives me the best overall exposure. It's up to me to decide on how to deal with the shadows and highlights.

Figure 2.8 illustrates the accuracy of Matrix metering on an image with multiple light values—from the white of the eagle's head to the dark brown of its body and the medium tones of the chick, the background, and nest.

FIGURE 2.8
The eagle and its chick were correctly exposed using Nikon's 3D Color Matrix metering.

CONTINUOUS FOCUS

To capture a sequence of images in sharp focus, I set my focus to Continuous AF (AI Servo on Canon cameras). I then focus on my subject's eye and begin panning with it as it moves. The camera continually focuses with my moving subject, fine-tuning as the distance changes.

Nikon has upped the ante with its Dynamic AF setting (**Figure 2.9**). All I need to do is select the focus point and depress the shutter button halfway down to acquire focus. When I begin to pan with a moving subject, Dynamic AF takes over, expanding the focus area to include several focus points (9 or 21 on the D3 family; refer to your manual to see if your camera offers this feature). As long as I can keep the subject within the expanded focus area, the camera will continue to track focus with a moving subject.

CONTINUOUS ADVANCE

Part and parcel of the continuous focus setting is continuous advance (**Figure 2.10**) where the camera fires continuously as long as you hold down the shutter (or the buffer fills). High-performance cameras have large buffers to allow for a greater number of sequential images. The buffer is where images are stored while the camera writes the files to the Compact Flash card (or SD media). The Nikon D3S has a 36-frame buffer (in RAW), which at 9 frames per second means I can capture 36 images in 4 seconds. Or, I can shoot in small bursts and keep following the action while my camera writes the files to the card. Now that's performance!

FIGURE 2.9
Dynamic AF uses multiple focus points grouped in a cluster to maintain focus on a moving subject.

FIGURE 2.10
The continuous high setting allows me to shoot at up to nine frames per second on the Nikon D3S.

NOTE

Most cameras have continuous advance. Refer to your manual for the frames per second rating and buffer size of your camera.

Using continuous Dynamic AF along with continuous advance allows me to capture peak of action. **Figure 2.11** illustrates continuous Dynamic AF and continuous advance used together to capture a sequence of images as I tracked a coyote mousing in the snow in Yellowstone National Park. I focused on his eyes and followed him as he worked the meadow. When he jumped in the air, I simply held down the shutter while panning with his movement, confident that Dynamic AF would keep him in focus.

NOTE

A side benefit of using continuous advance is that typically the middle frames in a sequence are the sharpest. So, if you fire off three or more frames, you have a higher chance of one or more images being tack sharp.

FIGURE 2.11
I was able to capture a sequence of images using Nikon's continuous Dynamic AF along with continuous advance.

HIGHLIGHT WARNING

One of the many benefits of digital photography is the rear LCD of a DSLR camera that allows you to review the images you have captured. Although it is a great tool for providing instant feedback on sharpness, composition, and exposure, I find it lacking in providing a true visual of the correct exposure. Enter Highlight warning (found in the Playback menu on Nikon and Canon cameras; check your instruction manual to see if your camera offers this invaluable feature); this setting, when enabled, allows me to see problem areas in the brightest part of my image. If I have Highlight warning turned on (**Figure 2.12**) and there are parts of a scene that are blown out without any detail, the affected areas will blink black, white, black, white (**Figure 2.13**), warning me that there is an exposure issue that I should be aware of. Based on this information, I can choose to change the brightness of the overall scene using exposure compensation, bracket several exposures and blend them into an HDR (high dynamic range) image, or simply let it go and keep shooting. My choice is based on the subject and whether or not it is moving.

NOTE

More on how I handle exposure issues is discussed in Chapter 3.

FIGURE 2.12
Highlight warning is enabled in the Playback menu.

FIGURE 2.13
The areas that blink black and white indicate blown-out (bright) highlights with no detail.

ISO

Another great advantage of digital photography is the ability to change the ISO from one image to the next as the light values dictate. Even with the low-noise capabilities of today's cameras, I still try to set my ISO at the lowest setting I can get away with to maintain the lowest noise and highest resolution in my images. However, if I do need to increase my ISO to make sharp images, I can do so with confidence, knowing that my images will be crisp and relatively low noise (**Figure 2.14**). The amount of noise generated from high ISO settings varies from camera model to camera model. Cameras with full-frame sensors and greater pixel depth tend to produce low noise images even at high ISO settings. All of today's digital cameras do a much better job than those just a few generations old.

TIP

Increasing your ISO should only be done when the benefit of the higher ISO (faster shutter speed) outweighs the increase in noise.

FIGURE 2.14
An ISO setting of 1600 enabled me to photograph a pair of bald eagles perched on a cliff in low light while hand holding my telephoto lens.

COLOR SPACE

Digital cameras have two color space options: sRGB and Adobe RGB (**Figure 2.15**). For the Web, sRGB is the color space used. Most computer screens don't have the resolution to show the full color gamut of an Adobe RGB image; therefore, if you are working on images for email or the Web, sRGB is the color space best suited for the job. If, however, you plan to output your images to print or work on them extensively in the digital darkroom and want the greatest color gamut and even transitions, Adobe RGB is the color space to use. With its millions of colors compared to hundreds of thousands of sRGB files, the color and tonal transitions are smoother and color accuracy is easier to achieve. If you have your camera set to shoot in RAW format, it is a moot point which color space you use. But coming from the school of getting it right in the camera, I make a habit of setting everything I can in-camera to avoid errors and long processing time in the digital darkroom. As a result, if I decide to change to say shooting in JPEG format for a project, I don't have to remember to change my color space.

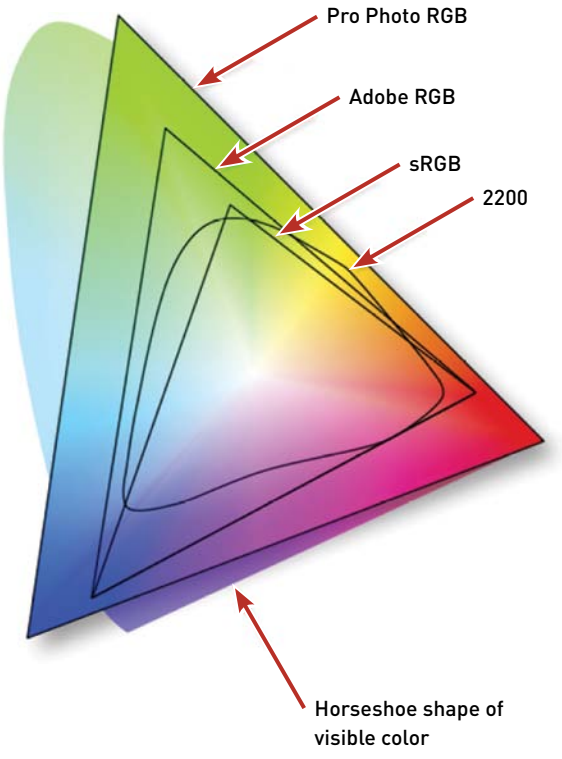


FIGURE 2.15
This image illustrates the difference in size between sRGB and Adobe RGB color spaces.

NOTE

Color space is only applicable when processing images with software that utilizes color spaces, such as Adobe Photoshop and Lightroom.

FIGURE 2.16
Turning File number sequence on sets your camera's numbering system to count consecutively from 1–9999.

FILE NUMBER SEQUENCE

It's easy for a photographer to get carried away when out in the field surrounded by wildlife and shoot several cards in a day. Depending on how you edit and file your images, you may end up with several card's worth of images in one folder. If you have File number sequence turned on, you can easily add card after card of images into that one folder. If you don't have File number sequence turned on, beware! You see, if file number sequence is turned on and you fill one card with say, images numbered 1–99, the next card will begin numbering at 100–199 and so on, preventing duplicate numbers between cards. If the setting is turned off, each card you use will repeat the sequence of numbers beginning at 1, potentially causing you to overwrite the first set of images with those of the same name in a folder. Setting your camera to File number sequence On (**Figure 2.16**) will prevent you from feeling the heartbreak of overwriting your images one day; trust me.

SHOOTING TECHNIQUES

Now that you have adjusted the buttons, dials, and menus on your camera, it's time to take it in hand and begin photographing. To do so successfully requires that you use proper handholding and long lens techniques to capture sharp images. Whenever possible, I use a tripod, but when circumstances are not favorable for using a tripod, I have no problem hand holding my camera, even at relatively slow shutter speeds. With the proper technique and some practice, you'll be able to get sharp images from your camera at surprisingly low shutter speeds.

PROPER HANDHOLDING TECHNIQUE

There is a right way and a wrong way to hand hold your camera. The right way (**Figure 2.17**) enables you to become a solid support for your camera and allows you to capture well -defined images. Just follow these steps:

1. Begin by holding your left hand out palm up.
2. Rest your lens in your left hand

3. Using your right hand, take hold of the grip.
4. Bring your camera to your eye and press your eye against the rubber eyecup firmly (you do have a rubber eyecup, don't you?).
5. With both elbows tight against your side and the camera gripped firmly in both hands, gently squeeze the shutter button.

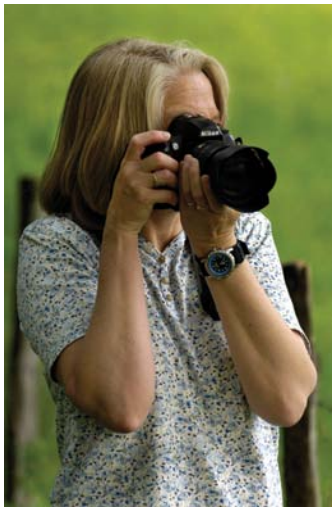


FIGURE 2.17
Keeping your elbows close against your body makes you a more stable platform when hand holding your camera.

PROPER LONG LENS TECHNIQUE

Just because you mount your camera with a long lens to a tripod does not ensure sharp images. Just like proper handholding aids in acquiring sharp images, so too does proper long lens technique. Many people feel that using Mirror Lock Up and/or a remote shutter release is the best bet for making the sharpest image possible, and although there are definitely times in which both techniques can be used, wildlife photography is a hands-on activity. You never know when your subject will move, and if you have the mirror up or are fumbling for the remote release, you will miss some great shots. Instead, by incorporating proper long lens technique, you can achieve sharp images even while panning with a moving subject. Here's how:

1. Mount your longest lens to the tripod using a gimbal head (gimbal heads improve your panning skills with their smooth operation) so they are perfectly balanced when you're not touching them.
2. Loosen the knobs on the head so they are loose enough to move with some tension.
3. Loosen the rotating collar release knob so the lens rotates freely.
4. Place your left hand loosely on the barrel of the lens directly over the center of the tripod (**Figure 2.18**).
5. Grasp the camera in your right hand.
6. Press your eye against the rubber eyecup with some constant pressure.
7. Gently squeeze the shutter release button as you exhale.

FIGURE 2.18
Resting your hand on the barrel of the lens dampens vibration caused by mirror flop and the shutter opening and closing.

TIP

Your left hand also acts as a guide for steering your lens when panning.

PROPER PANNING TECHNIQUE

Using the same techniques described in the preceding sections, you can incorporate panning into your image making and capture action in a still photograph. Whether you want a tack sharp, stop-action image or one that has a romantic blur to it, using proper handholding and long lens techniques along with some panning skills, you'll be working the action in no time.

I begin to acquire focus as soon as I can get my lens on the subject, no matter how far away the subject is. This gives me ample time to find the subject, focus, and get the rhythm of its movement as it approaches, so I am panning at the same speed as my subject (**Figure 2.19**). I continue to pan with the subject keeping the shutter partially depressed to enable continuous focus as my subject nears the firing zone. Once the subject is within firing range, I gently depress the shutter, continue panning, and follow through until the subject has passed the zone. I then lift my finger from the shutter while continuing the panning motion beyond the last click to ensure that I don't jerk the camera on the last frame, potentially missing the best shot.

FIGURE 2.19
Smooth panning at the same speed as your subject is key to making clear images of moving subjects.

Chapter Assignments

By now you have a good idea of some key settings to make on your camera and the proper shooting techniques to capture wildlife. It's now time to get down to business and practice what you've learned. Take some time to work through each of the assignments. Look for your strong points and where you need the most work, and spend time becoming proficient with your camera's settings and managing your equipment.

Basic Camera Settings

Sit down with your instruction manual and camera and get to know them both. Go step by step through the book and set the buttons, dials, and menus on your camera to suit your shooting style. Some features you might never use, so just pass them by. But there are also features that you might use occasionally, so it's good to know that they are available and accessible at some point when you need them.

Proper Handholding/Long Lens Technique

Part A: Using your camera with one lens, carefully hand hold the camera and shoot a series of images from the slowest shutter speed to the fastest. Compare the images to see just how slow a shutter speed you feel comfortable with. Then keep practicing until you can shoot at even slower shutter speeds while hand holding the camera.

Part B: Mount your camera and longest lens on your tripod, and follow the same steps as in Part A using the proper long lens technique you learned in this chapter. Compare the images to see how slow you can comfortably shoot a stationary subject with your camera mounted on a tripod.

Panning Techniques

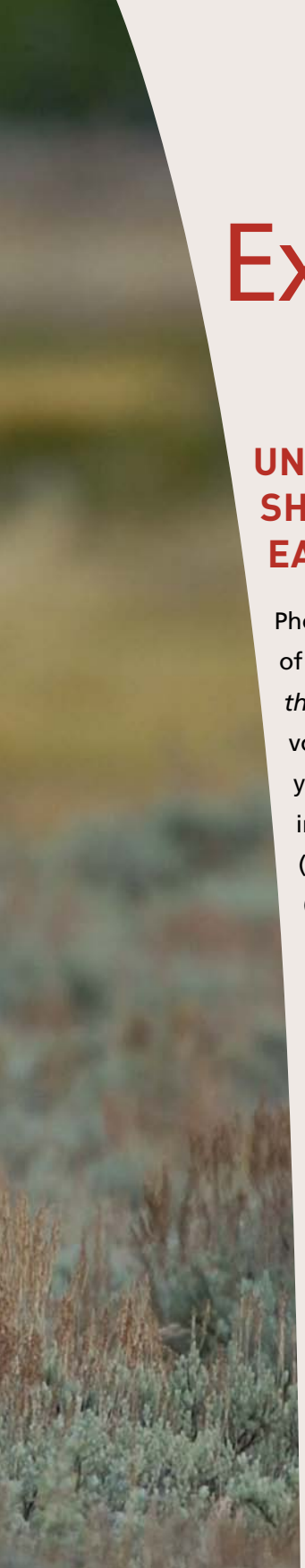
Mount your camera and longest lens on your tripod, and do the preceding Part B exercise, only this time pan with a moving subject. Once you find your comfort level as far as shutter speed, keep practicing panning until your image keeper ratio is higher than the number of your throwaway images. You will find that you have a higher keeper ratio with a fast shutter speed, and that the keeper count dwindles as your shutter speed decreases. Keep practicing your panning technique until you can consistently capture sharp images.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

3

ISO 400
1/40 sec.
f4
600mm lens



Exposure Simplified

UNDERSTANDING ISO, APERTURE, AND SHUTTER SPEED: THEIR RELATIONSHIP TO EACH OTHER AND TO LIGHT

Photography is the language of light. The quality, quantity, and direction of light adds drama and mood to your images. If *a picture is worth a thousands words*, then exposure must be the dictionary filled with rich vocabulary from which you find the "words" that so eloquently tell your story of wild and wonderful encounters with nature through your images. Understanding the elements that make up the exposure triangle (ISO, aperture, shutter speed) allows you to control depth of field (aperture), stop action or blur motion (shutter speed), and your sensor's sensitivity to light (ISO).

PORING OVER THE PICTURE

Increasing my ISO to 400 was required to maintain a shutter speed fast enough for a sharp image while handholding a telephoto lens from a boat.

With the subject on a relatively flat plane with my camera, I was able to use a fairly wide aperture and keep the birds in focus while increasing my shutter speed to prevent motion blur.

Understanding my camera's exposure meter as well as the exposure challenge of the scene gave me the knowledge to dial in minus two exposure compensation to avoid losing detail in the white of the birds.

ISO 400
1/750 sec.
f5.6
70–200mm lens with TC14E II

When faced with an exposure challenge of small, light subjects against a large, dark background, a decision must be made as to what creative exposure combination will best capture the essence of the Black-legged Kittiwakes precariously nesting on a rock face.

PORING OVER THE PICTURE

In most situations I simply rely on my camera's exposure meter to determine my base exposure and adjust ISO, aperture, and shutter speed to capture the effect I desire. But when faced with lighting challenges, having a good understanding of light and my camera's meter gives me the skill to make appropriate exposure decisions that result in images that represent my vision.

The bright scene enabled me to keep my ISO low while still maintaining a fast shutter speed to stop the action and enough depth of field to keep the bird in focus.

With a white sky for a backdrop, I work with the situation, dialing in plus exposure compensation to avoid underexposing the subject against the bright background, which results in an artistic high-key effect.

ISO 200
1/750 sec.
f8
600mm lens
with 1.4X
teleconverter

The Highlight warnings were blinking on my rear LCD to notify me of the overly bright background. I chose to ignore the “blinkies” and kept my chosen exposure value for the effect I was after.

EXPOSURE DEFINED

"What's your exposure?" is a question I am asked frequently when in the field. What is exposure? Wikipedia defines exposure as the total amount of light allowed to fall on the photographic medium (sensor) during the process of taking a photograph. The three elements that play big roles in the making of well-exposed images are ISO, aperture, and shutter speed. When properly mixed and matched in various combinations, those three elements provide your image with the mood you are trying to convey. Today's cameras are highly sophisticated machines. They can evaluate a scene and calculate what they consider to be a good exposure based on selected criteria that you have dialed into your camera, all in a split second. That criteria includes ISO, aperture, or shutter speed, as well as the focal length of your lens, and yes, even adding in the focal point used in the overall calculation. In even, mid-tone scenes (**Figure 3.1**) I rely on my camera's built-in light meter to give me the proper exposure value. I select the appropriate ISO and aperture to suit my vision of the finished image and then let my camera match the correct shutter speed based on my settings and the light.

Let's take a look at ISO, aperture, and shutter speed—the three elements that make up the exposure triangle—their relationship to each other and to light, and how the various combinations of the three affect the end result of your images.

FIGURE 3.1
Diffused, even light allowed me to let my camera establish the correct exposure value for this Blue Grosbeak while I concentrated on the bird's behavior.

EXPOSURE TRIANGLE

For every correct exposure there are several exposure combinations that will result in the same exposure value but with very different results in the overall look of your images. Which combination you choose is directly related to the story you want to tell—from a sharp, storytelling image where everything is in focus (great depth of field) to one where the subject stands out in sharp relief against the softly blurred background (shallow depth of field), which is controlled by the aperture you select. When the light is low, the ISO you choose directly impacts the aperture and shutter speed combinations available; the trade-off for increased ISO may be greater noise in your images. And the shutter speed you end up with determines whether you will stop action (fast shutter speed) or blur motion (slow shutter speed). If any one element changes, the other settings will be affected. Using the exposure triangles in **Figure 3.2** as a starting point, let's look at the result of changing your settings.

NOTE

Each of the exposure settings in Figure 3.2 is the equivalent of the same amount of light reaching the sensor. But the result can be dramatically different depending on the combination you choose in a given situation.

ISO

ISO is the camera sensor's sensitivity to light. The lower the number (100, 200, etc.), the brighter the light needed to make a correct exposure. A tripod will aid in capturing sharp images with low ISO settings. With low ISO settings (**Figure 3.3**), you'll notice ultrafine detail and smooth-looking images with low noise. One big advantage to digital cameras is the ability to change ISO from one frame to the next as the light levels dictate. Even with the low noise capabilities of today's digital cameras, I keep my ISO set to the lowest I can get away with to ensure the best quality possible in my images.

Higher ISO settings (800, 1600, etc.) allow you to maintain a faster shutter speed or smaller aperture in low light. The resulting effect of high ISO is more noise (**Figure 3.4**). Even though I prefer to keep my ISO as low as I can, if raising the ISO makes the difference between capturing a sharp, noisy image and one that ends up being deleted because it is blurred due to slow shutter speeds that were unable to stop the action, I'll choose a higher ISO. High ISO settings enable me to handhold my camera in low light.

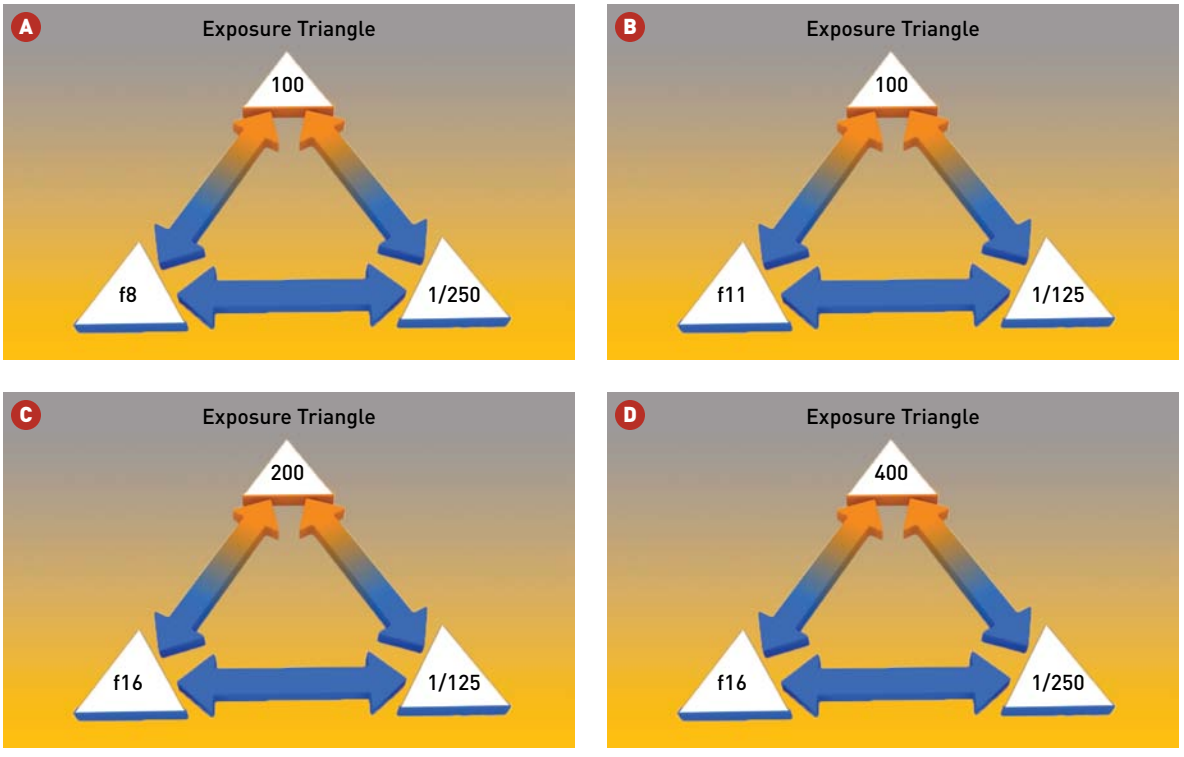


FIGURE 3.2

A The exposure triangle with a basic exposure on a partly sunny day: ISO is set to 100, aperture is set to f8, and the resulting shutter speed is 1/250 sec.

B 100 ISO, f11 at 1/125 sec. Changing the aperture from f8 to f11 causes the shutter speed to slow from 1/250 sec to 1/125 sec.

C 200 ISO, f16 at 1/125 sec. If you need to maintain the shutter speed you have but still need more depth of field, increase the ISO to 200 and close down the aperture to f/16 while staying at 1/125 sec.

D 400 ISO, f16 at 1/250 sec. If you need to increase the shutter speed but still keep the depth of field, increase the ISO to 400 and leave the aperture at f/16, which increases the shutter speed to 1/250 sec.

TIP

I start every exposure by setting my ISO value first, based on the amount of light for a given scene.

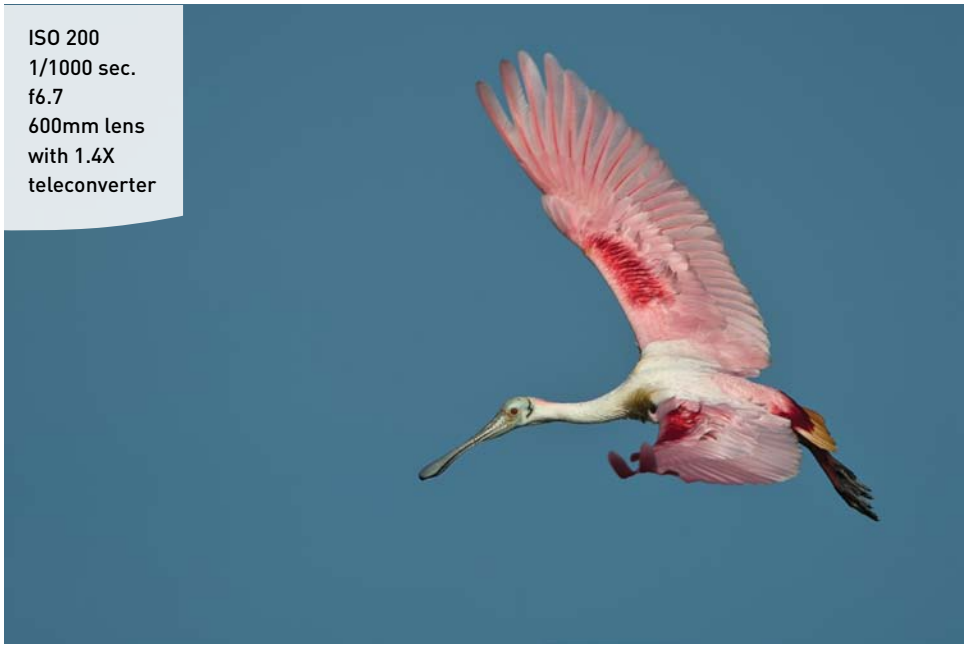


FIGURE 3.3
Setting the camera to its lowest ISO setting of 200 produced a smooth, noise-free sky.

FIGURE 3.4
The low light of late-evening skies forced me to increase my ISO to capture a late-night visitor outside my cabin in Alaska.

DIGITAL NOISE

Digital noise is the result of long exposures or high ISO settings and shows up the most in areas of smooth colors in both light and dark images. It is caused by heat—the longer the shutter is open, the more the sensor heats up—and by high ISO where the signal gain is increased to capture an image in low light, which causes noise. Noise is recognized as colorful "speckles" scattered throughout the image. There are a couple ways to reduce noise in these situations: using in-camera noise reduction, which I don't recommend when photographing wildlife because it slows down the camera's performance, and using noise-reduction software when processing the image in your computer.

APERTURE

Aperture (often referred to as an f-stop) is the size of the lens opening that allows light to pass through to the sensor. The aperture I select is so important to the appearance I am able to capture in my images that I nearly always shoot in Aperture Priority. It is also the element of the exposure triangle that is the most confusing to many people. Let's take a look at apertures and their role in the exposure equation. The smaller the aperture number (2.8, 4.0, etc.), the bigger the lens opening (**Figure 3.5**). The bigger the lens opening, the more light is let through the diaphragm.

Wider apertures produce less depth of field (**Figure 3.6**) for a selective focus look and faster shutter speeds (**Figure 3.7**) to stop action and allow me to handhold my camera.

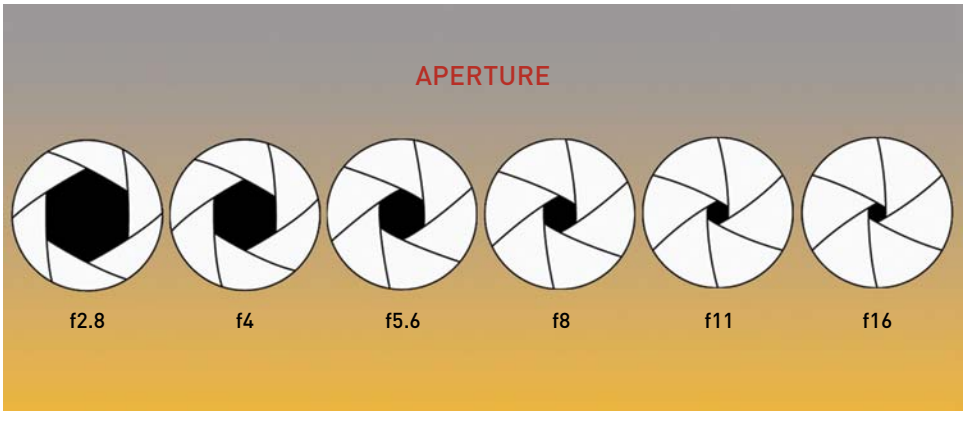


FIGURE 3.5
Small numbers equal less depth of field; large numbers equal more depth of field.

FIGURE 3.6
A wide aperture blurs the background into a palette of soft colors, making the Great Blue Heron stand out against the background.

FIGURE 3.7
I needed a fast shutter speed to capture the puffins sharp in mid-flight.

DEPTH OF FIELD

Depth of field is the area of acceptable sharp focus from near to infinity within an image. The aperture you select controls the depth of field in your images. In addition to aperture, depth of field is affected by distance to subject (the closer you are, the less depth of field) and the distance of the subject to the background (the closer the subject is to the background, the more "in focus" the background will appear).

The bigger the number (f11, f16, etc.), the smaller the lens opening. Smaller apertures produce greater depth of field (**Figure 3.8**) and slow shutter speeds (**Figure 3.9**), requiring the use of a tripod for stability.

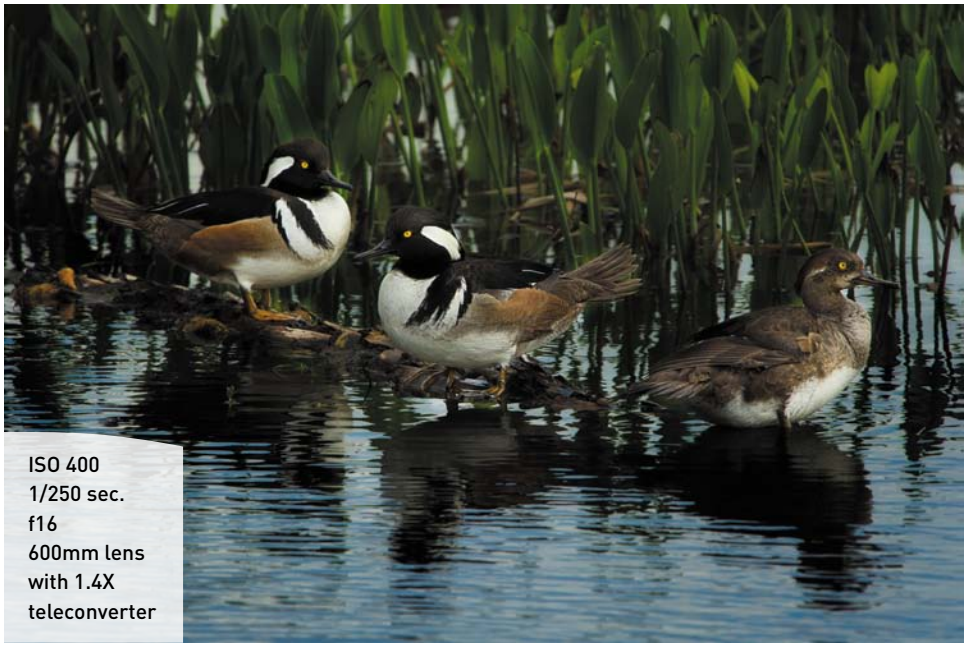


FIGURE 3.8
A small aperture allowed me to get all three Hooded Mergansers in focus.

FIGURE 3.9
A slow shutter speed created a romantic blur as a pair of Black Skimmers are reflected in the mirror-like water as they fish at twilight.

SHUTTER SPEED

The shutter speed is the length of time the shutter remains open, allowing the light to pass through the aperture and onto the sensor (**Figure 3.10**).

FIGURE 3.10
A shutter-speed graph.

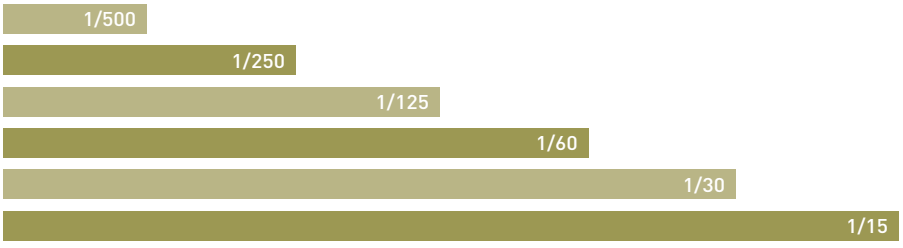


FIGURE 3.11
A fast shutter speed stopped the spraying water drops in midair as a Common Grackle bathed.

A fast shutter speed (1/500, 1/1000, etc.) stops action. Bright light or a high ISO setting is required to stop action (**Figure 3.11**). Handholding the camera is easiest with a fast shutter speed. Slow shutter speeds (1/15, 1/30, etc.) blur motion (**Figure 3.12**). A tripod is an essential tool in the making of blur-motion images to get a smooth panning action.

ISO 200
1/500 sec.
f6.7
600mm lens
with 1.7X
teleconverter

FIGURE 3.12
A sense of motion is captured with a slow shutter speed, blurring the water while keeping the motionless bear sharp.

LIGHT

Light is the basis of all your exposures. Light is ever-changing and wildlife is constantly moving, so you must be ready at a moment's notice to adjust the settings on your camera to deal with the changing light to capture the spontaneity of a fleeting instant.

Your camera meters the amount of light in a given situation, evaluates the settings you have made, and formulates an exposure. The brighter the light, the faster the shutter speed to stop action, the smaller the aperture for great depth of field, and the lower the ISO for noise-free images. The lower the light, the slower the shutter speed, resulting in blurred motion. A wider aperture renders shallow depth of field. High ISO settings allow shooting in lower light with a cost of greater noise. The direction and quality of light adds mood and drama to your images. How you handle that light and where you place yourself to capture that light all plays into the end result, your image.

QUALITY AND QUANTITY OF LIGHT

Quality and quantity of light go hand-in-hand. Many situations that have the best light also have low light, whereas the times of day with the greatest amount of light are often too bright and contrasty for the quality of light you are looking to record. Dedicated wildlife photographers will get up at o'dark thirty and head out to be in place and ready for sunrise to capture the golden colors of early morning light bathing their subjects in a warm glow (**Figure 3.13**).

In a matter of minutes the sun rises higher in the sky, the warmth of the early light fades away, and the quality of light moves into cooler tones, changing the mood entirely (**Figure 3.14**).

Overcast light is a good, safe light for photographing mammals and birds (**Figure 3.15**). The light is soft and diffused, enabling you to capture the greatest detail along with good color saturation. Once the beautiful light of early morning is gone, I prefer an overcast day to prolong my shooting time.

FIGURE 3.13
With the sun over my shoulder, the warm light casts an even glow on the sandhill crane, emphasizing the feather detail.

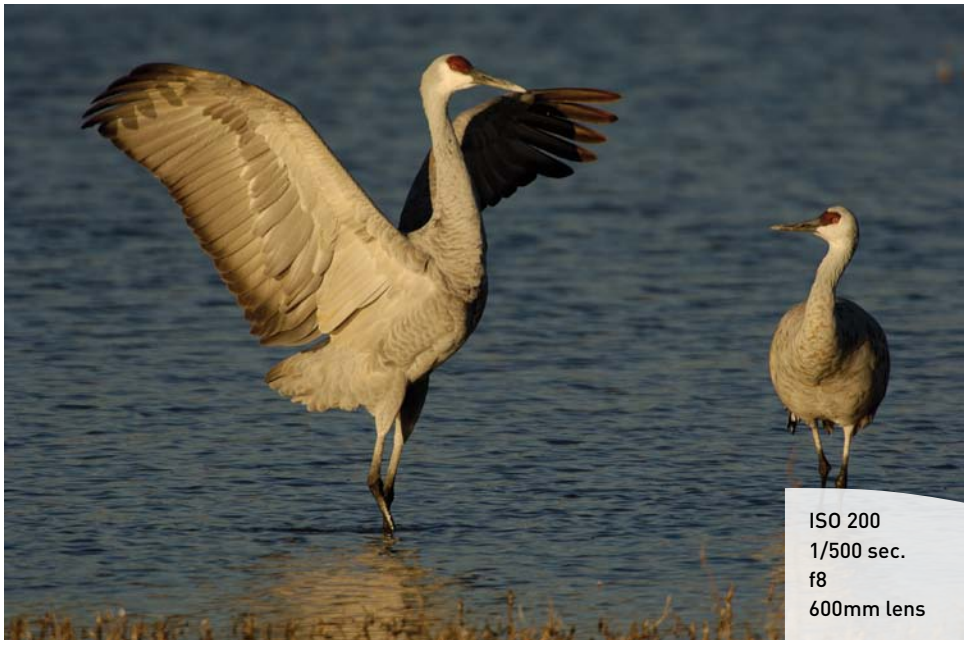


FIGURE 3.14
The angle of the sun changes the quality of light. Cooler tones prevail around mid-morning.

FIGURE 3.15
The diffused light of an overcast day enhanced the detail in the hair and horns of a Bighorn sheep.

ISO 200
1/30 sec.
f38
600mm lens
with 1.4X
teleconverter

FIGURE 3.16
Low light and a small aperture enabled me to shoot at a shutter speed slow enough to capture the blowing snow in motion.

Stormy weather is one of my favorite shooting conditions because of its dramatic light and extreme effects. While everyone runs for cover, I stay out in the worst of weather and poor light to capture the intensity of a blowing snowstorm and a bison's struggle to survive (**Figure 3.16**). You need to know how to expose for the flat (quality), low (quantity) light to emphasize the severity of the situation and capture the blowing snow.

Sunny days give you another challenge to deal with—shadows (**Figure 3.17**). Once the sun has risen into the sky on a sunny day, the light gets hard with strong highlights, heavy shadows, and an exposure range that is greater than your camera's sensor can capture, making you choose the area of most importance in the image when adjusting for the extreme contrast. Do you let the highlights blow out? Or, do you let the shadows go to black? What exposure best communicates the story you are trying to tell with your image?

NOTE

Most photographers wait out the middle part of the day, downloading and editing images, and waiting for the sun to drop lower in the sky and the light to become softer and more pleasing to the eye.

FIGURE 3.17
The hard light of midday brings with it bright highlights and heavy shadows.

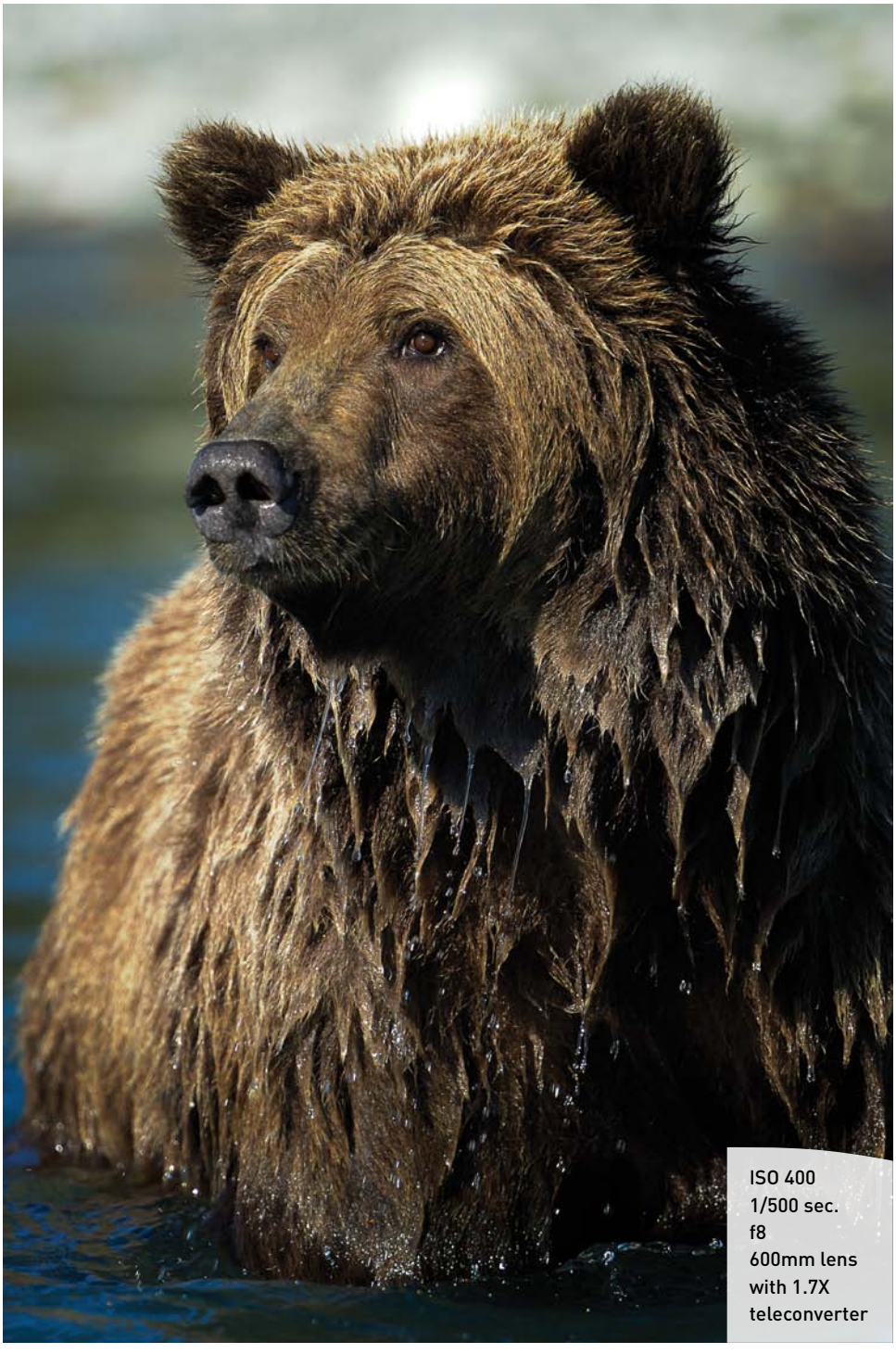
DIRECTION OF LIGHT

Light not only has quality and quantity, but it also has direction. And like quality and quantity, the direction of the light is part of the overall equation that makes your images look the way they do. In some cases you can control the direction by simply placing yourself on the axis from the sun that you desire. More often than not, however, you are forced to work with the direction of light based on the subject's location and whether or not you have freedom of movement.

Front-lit subjects (**Figure 3.18**) show the greatest detail in feathers or fur with little to no shadows. This light is easy to expose when using your camera's meter, and the exposure range is usually within the sensor's capability to capture information from the brightest spot to the darkest shadows.

FIGURE 3.18
Front light is considered best for capturing great detail and low contrast.

FIGURE 3.19
Sidelight emphasizes the texture of a grizzly bear's fur.



Sidelight adds texture, form, and shape to an image (**Figure 3.19**). Contrast is greater with the shadows and highlights defining your image. Images exhibit more drama, and your subjects exhibit more character with contrast, shadow, and light directing your viewer's eye within the frame.

Many people avoid backlit subjects because they feel that they lose detail in the shadows. I find backlight to be very dramatic and bold, lending a graphic element of shape and form to the subject. With the subject revealed as a silhouette (**Figure 3.20**), an air of mystery and drama is added to the image.

FIGURE 3.20
A backlit pelican coming in for a landing is recognizable by its silhouette.

PUTTING IT ALL TOGETHER

All the best equipment and proper shooting techniques are useless without good exposures. The exposure I choose is dictated by light, my subject, what it is doing, and the effect I am hoping to capture. By understanding light and the elements in the exposure triangle, I have complete control over the effects I can achieve with my images. During a spontaneous moment between two Bighorn rams vying for a ewe's favors, I compromised some noise by selecting a high ISO to reach a shutter speed that would stop the action and give me a sharp image (**Figure 3.21**).

When a grizzly bear crossed the river, climbed out on the far bank, and began to shake (**Figure 3.22**), I thanked the photo gods for the backlighting that emphasized the spray of water against the dark background. The lack of detail in the bear draws the viewer's attention to the spray, which is really the subject in this image. With plenty of light to stop the action, I was able to keep my ISO low, and to emphasize the silhouette effect, I dialed in minus one stop of exposure compensation (more on exposure compensation in Chapter 8, "Advanced Techniques").

FIGURE 3.21
Low light and fast action called for a high ISO to capture the moment.

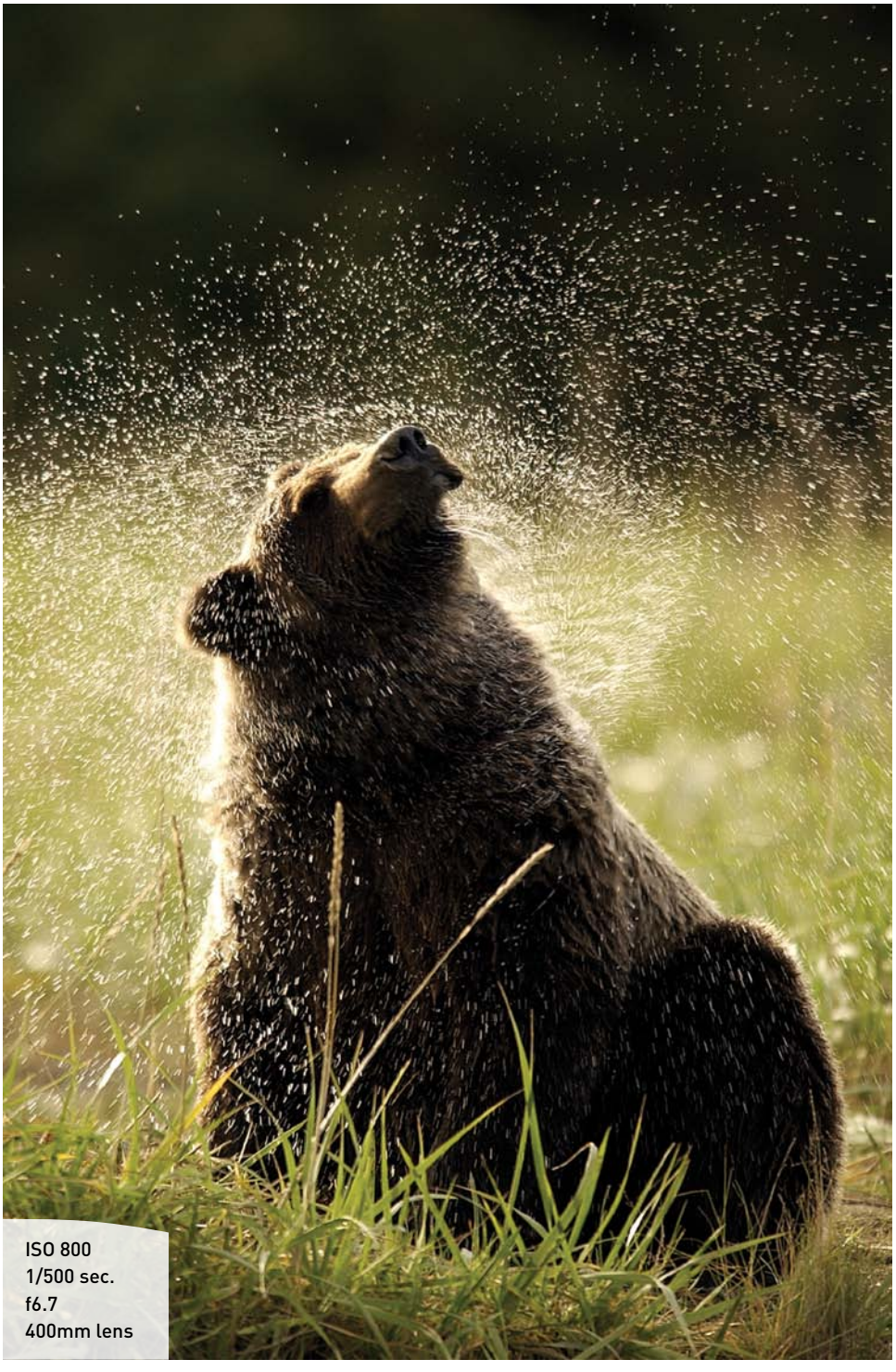


FIGURE 3.22
Backlighting highlights the spray of water as a bear shakes.

Exposing for a subject in a snow scene is not the challenge it once was. My meter does a great job of getting me in the ballpark, and based on the Highlight warnings, I can make adjustments to my exposure while I still have a chance to get it right on the spot. When a bull elk paused from grazing on the grass shoots sticking out of the snow, I composed and clicked knowing that there would be some blown-out highlights in the bright snow. I chose to let them blow out to keep the detail in the elk (**Figure 3.23**).

A lot of information was covered in this chapter, but the end result of your images relies on your ability to understand light and the elements that make up your exposure, so you can make decisions based on the outcome you are hoping to achieve. With a strong grasp of ISO, aperture, and shutter speed, and their relationship to light, you will be well on your way to making great wildlife shots.

For more on exposure, check out Jeff Revell's excellent book *Exposure: From Snapshots to Great Shots* (Peachpit, 2010).

FIGURE 3.23
With an exposure range greater than my sensor could capture, I was faced with blown-out snow or a dark elk. Because the elk was my subject, I chose to expose on the bright side to better reveal the detail in its fur.

ISO 200
1/500 sec.
f6.7
600mm lens
with 1.7X
teleconverter

Chapter Assignments

Before moving on, be sure to take the time to do the following assignments, which are meant to help you increase your understanding of light and exposure.

Understanding ISO

On an overcast day, set up your camera on a tripod and photograph the same scene at different ISO settings. Begin at the lowest ISO your camera has and continue in one-stop increments to its highest ISO. Compare the results on your computer to get an idea of what level you can increase your ISO to and still get the quality image you expect. Each camera is different, just as each photographer will have a different tolerance for noise. By knowing what your camera is capable of, you can make needed adjustments in the field to capture your subject as you see it.

Understanding Aperture

Once again set your camera on a tripod and find a scene with a foreground, middle ground, and background. Focus midway into the scene (approximately one-third of the way in), and with your camera in Aperture Priority, cycle through the available apertures on your lens. Once back in the digital darkroom, compare the images to see the effects of different aperture settings on depth of field. If you understand the basics, you can make informed decisions on which aperture best captures your subject.

Understanding Shutter Speed

Find a scene with movement, a waterfall or stream, moving cars, and so on, and set up your camera on a tripod. Once again, set your camera to Aperture Priority and cycle through the various apertures in one-stop increments. This time when you review your images, look at the motion rather than depth of field. Notice what the varying shutter speeds do to either stop motion or blur it and the different moods created by each technique.

Relationship of ISO, Aperture, and Shutter Speed

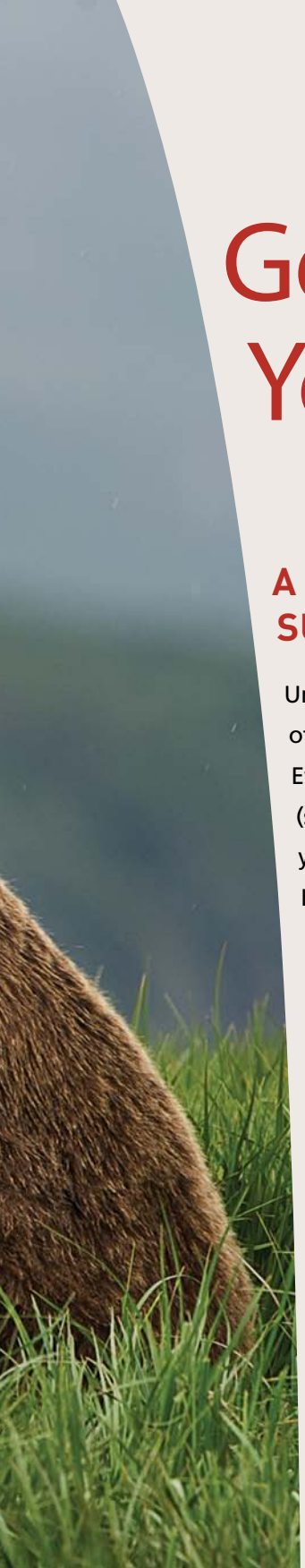
Find a scene with visual depth (foreground, middle ground, and background) as well as movement. Using a tripod, cycle through your ISO settings, apertures, and shutter speeds. Examine your EXIF data to see the effect of increasing your ISO on your aperture and shutter speed, the change in shutter speed when you adjust your aperture, and so forth.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

4

ISO 400
1/350 sec.
f8
500mm lens



Get to Know Your Subject

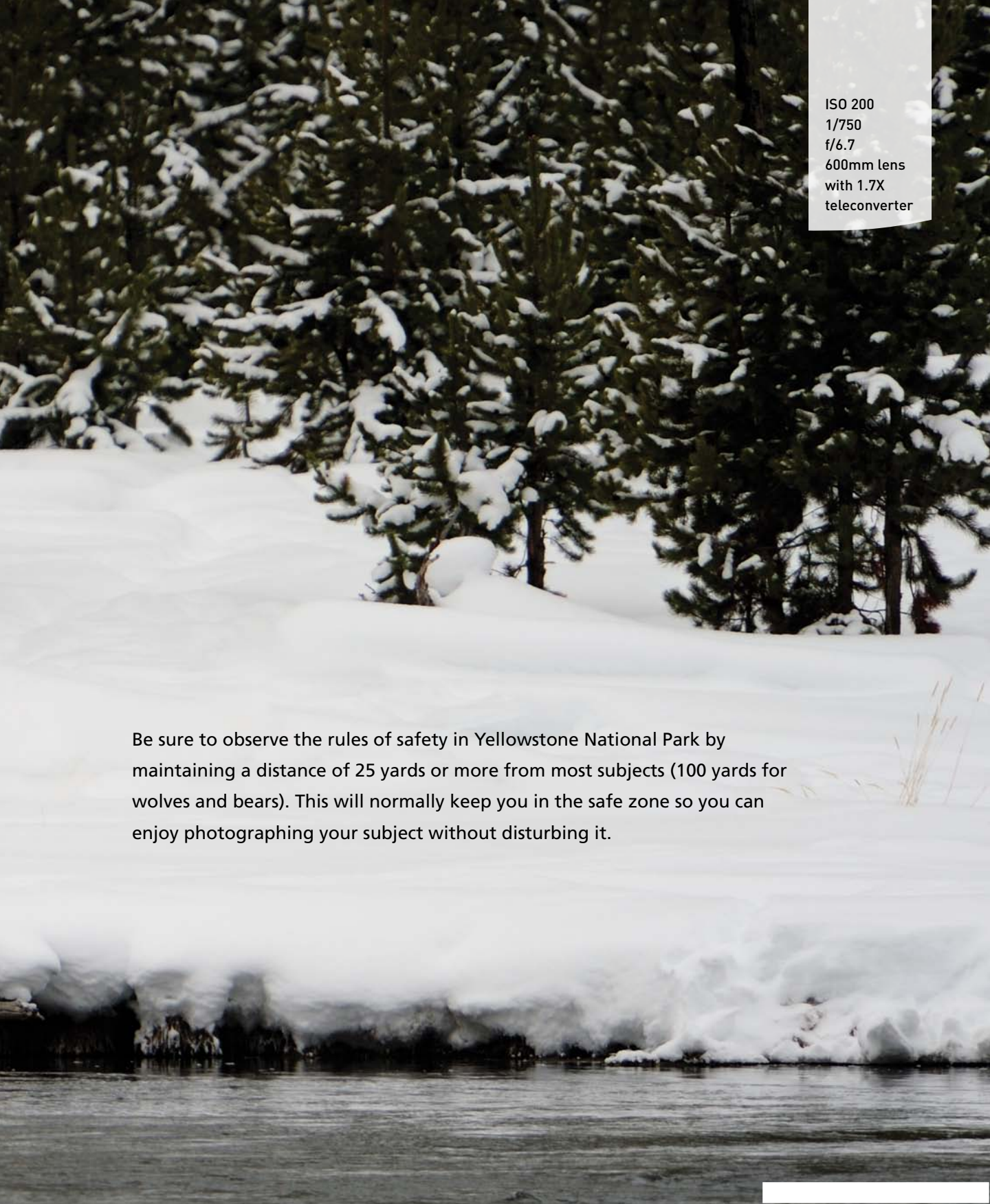
A BETTER UNDERSTANDING OF YOUR SUBJECT'S BEHAVIOR LEADS TO GREAT SHOTS

Understanding the buttons and dials, the menus, and the nuts and bolts of your camera, as well as becoming proficient with it, is a good start. Even though you are anxious to get out in the field, if you are patient (something you need to be when it comes to wildlife photography), you'll not only get there, but you'll return with some excellent images. Knowing your subject is as important as knowing your equipment. To be a successful wildlife photographer, you must become a wildlife observer. It takes patience, persistence, and practice to capture more than just snapshots. Knowing your subject thoroughly helps you to anticipate interesting behavior so that you'll be prepared with the right lens attached and the right settings dialed in, and be ready to fire when the action begins.

PORING OVER THE PICTURE

Causing an animal to alter its behavior could be the difference between life and death, as fleeing burns calories that are greatly needed to survive harsh climates. If your actions cause an animal to run, you are too close!

Spotting a wolf in Yellowstone is a rare treat—and getting photographs of one is even more special. With ethical behavior, slow movements, and minimal noise, you may have enough time to get your lens on a wolf long enough to make a few images.



ISO 200
1/750
f/6.7
600mm lens
with 1.7X
teleconverter

Be sure to observe the rules of safety in Yellowstone National Park by maintaining a distance of 25 yards or more from most subjects (100 yards for wolves and bears). This will normally keep you in the safe zone so you can enjoy photographing your subject without disturbing it.

RESEARCHING WILDLIFE

Long before you are face to face with your subject, you should have done your homework and learned as much as possible about your subject. Not only will this knowledge give you an edge when it comes to anticipating behavior, but you'll learn some fascinating information. For example, a grizzly bear cub is born in the dead of winter weighing mere ounces and nurses for several months while its mother hibernates before they both emerge from the den in the spring. The cubs are born with a light-colored necklace (natal ring), which gradually disappears over the course of a summer. If you are interested enough to photograph a subject, you ought to be interested in learning as much as you can about it. Knowledge of your subjects makes the time in the field much more enjoyable and helps to pass the slow times knowing that action can happen at a moment's notice.

BOOKS

There are many ways to learn about wildlife. Books are a great resource with tens of thousands of titles directed at wildlife in general, as well as those that are specific to an individual species. A good book on birds helps you to identify them and provides you with information on range, plumage during mating and nonmating seasons, size, shape, and so much more. Most libraries have a great wildlife section, but I prefer to build my own library of the subjects that I am most interested in to refer to at my convenience. I also enjoy coffee-table books filled with gorgeous photographs that give me ideas and motivation to go out and make my own beautiful images.

DVDS

DVDs (**Figure 4.1**) are also a great way to learn more about your subject. Not only will you learn behavior traits, but you'll get to witness that behavior in action as you watch bulls sparring with each other over harem rights or the mating dance of a prairie chicken. DVDs are informational and inspirational. *The Life of Birds* and *The Life of Mammals* narrated by Sir David Attenborough are filled with hours of great footage and information.

FIGURE 4.1
DVDs are a great way to observe wildlife behavior with narration explaining it at the same time.

INTERNET

We are so lucky to be living in the current technology age where information on any and all subjects is available at our fingertips. The Internet is full of sites that are dedicated to wildlife. Some sites provide a wealth of information about any subject you are interested in; others focus on what wildlife can be found in a specific location; and still others place an emphasis on protecting our wild heritage. Additionally, there are forums where members share wildlife sightings by area. You can join these forums to learn more and in the process make friends with those of similar interests. Some of the sites I frequent most are the Cornell Lab of Ornithology (http://www.birds.cornell.edu/Page.aspx?pid=1478) for in-depth information of birds; Wikipedia for a quick overview of any bird, mammal, reptile, and so on that I need to know about; and Birdbrains (http://listserv.admin.usf.edu/archives/brdbrain.html), which is an excellent forum for finding current hotspots to photograph birds in Florida. Numerous sites are available. Simply do a search to find information on the subject you are interested in.

NOTE

An Internet search for the word wildlife brought up 240,000,000 results.

FIGURE 4.2
iBird Pro is one of the apps that I have on my iPad for in-the-field reference.

MOBILE APPS

Nowadays, you can take your research a step further with apps for your portable devices that you can take with you in the field (**Figure 4.2**) for on-the-spot information. Not only do these apps tell you all about your subjects, but many provide audio of the calls and sounds they make.

LOCAL AND NATIONAL WILDLIFE ORGANIZATIONS

Check your local area for organizations that are dedicated to wildlife, such as the Audubon Society, which is a great resource for learning with all the classes and field trips they offer. Not only will you learn more about wildlife, you will also discover where to find wildlife in your area that you can revisit on your own time with your camera in hand. Chances are that you will even make friends with people who share the same interest and find photography companions to join you on wildlife adventures. NANPA (National Association of Nature Photographers of America) is a great organization for learning about wildlife and wildlife photography, and for meeting other like-minded wildlife photographers. The association also promotes good field ethics to protect wildlife while you enjoy the opportunity to photograph it (see the section "Field Ethics" for more on NANPA). Wildlife conservation is another area where you can learn about wildlife and give back to the wildlife that gives you such photographing pleasure. Some conservation groups include National Wildlife Federation, World Wildlife Fund, and Defenders of Wildlife. An Internet search will help you find an organization in your location and area of interest.

EXPERTS IN THE FIELD

Once you begin your research, you will be surprised at where it leads you. Knowing that mid-July is the best time to visit Florida to photograph Skimmers with their young (**Figure 4.3**), I make the trip there every couple of years. On one visit, an early-morning encounter with a couple of rangers led to an invitation to join them as they excavated a hatched-out sea turtle nest (**Figure 4.4**). Not only did I get some new images

FIGURE 4.3
Using a wide aperture, especially with a longer lens, blurs distracting background details.

FIGURE 4.4
Working with experts provides excellent photo opportunities and learning experiences.

for my files, but I also learned that the turtles come ashore beginning in May to lay their eggs. The female drags her massive body out of the surf to the dunes at night and then uses her rear flippers to dig a hole in which she lays approximately 100 eggs that are ping-pong ball size. She then covers the nest with sand and returns to the sea, never to return to that nest again. Approximately 60 days later, the hatchlings dig their way out of the nest and scurry to the sea (usually in the cool, dark of night) where they remain until it's their time to continue the reproduction process. I could go on and on, but I think you get my drift. Had I not met Ranger Mike, I wouldn't have had such an interesting and educational morning. In addition to rangers, biologists, wildlife researchers, volunteers at various refuges, and so on are all great resources for information.

FIELD ETHICS

As a wildlife photographer and observer you have a responsibility to enjoy your wildlife encounters safely and *ethically*. If you cause a subject to move away, you are too close. If your actions cause wildlife to flee, it could very well be the difference between life and death for your subject because the struggle to survive is great at certain times of the year. Keep in mind that you are not the only one your subject has encountered. Perhaps one small error on your part is no big deal in the overall scheme of things. But cumulative negative encounters by one person after another add up to learned

behavior, and a once-tolerant subject may flee at the mere sight of the next photographer who comes along. Or, even worse, it may act defensively and attack.

My friend Moose Peterson has a quote on his website that states: *"No photograph is worth sacrificing the welfare of a subject."*

NANPA has published the following guidelines for practicing good field ethics:

PRINCIPLES OF ETHICAL FIELD PRACTICES

- NANPA believes that following these practices promotes the well-being of the location, subject, and photographer. Every place, plant, and animal, whether above or below water, is unique, and cumulative impacts occur over time. Therefore, one must always exercise good individual judgment. It is NANPA's belief that these principles will encourage all who participate in the enjoyment of nature to do so in a way that best promotes good stewardship of the resource.

Environmental: knowledge of subject and place

- Learn patterns of animal behavior—know when not to interfere with animals' life cycles.
- Respect the routine needs of animals—remember that others will attempt to photograph them, too.
- Use appropriate lenses to photograph wild animals—if an animal shows stress, move back and use a longer lens.
- Acquaint yourself with the fragility of the ecosystem—stay on trails that are intended to lessen impact.

Social: knowledge of rules and laws

- When appropriate, inform managers or other authorities of your presence and purpose—help minimize cumulative impacts and maintain safety.
- Learn the rules and laws of the location—if minimum distances exist for approaching wildlife, follow them.
- In the absence of management authority, use good judgment—treat the wildlife, plants, and places as if you were their guest.
- Prepare yourself and your equipment for unexpected events—avoid exposing yourself and others to preventable mishaps.

Individual: expertise and responsibilities

- Treat others courteously—ask before joining others already shooting in an area.
- Tactfully inform others if you observe them engaging in inappropriate or harmful behavior—many people unknowingly endanger themselves and animals.
- Report inappropriate behavior to proper authorities—don't argue with those who don't care; report them.
- Be a good role model, both as a photographer and a citizen—educate others by your actions; enhance their understanding.

Adopted February 3, 1996, by the NANPA board of directors.

FIGURE 4.5
Signs are put in place to warn of possible danger from wildlife. By paying careful attention to them, you can avoid unpleasant, if not dangerous, situations.

ISO 200
1/250 sec.
f11
24–120mm
lens

From a strictly selfish standpoint, if wildlife continues to have negative experiences with people, our photographic opportunities will become less frequent and making great shots will be an even harder challenge to overcome.

Laws and rules are put into place for your protection, as well as that of the wildlife you pursue. Be alert, obey the rules, and pay attention to signs that warn you of possible danger (**Figure 4.5**).

TYPES OF WILDLIFE PHOTOGRAPHS

There are many types of wildlife images to consider, from the more static environmental portraits to frame-filling, in-your-face portraits. Some images capture your subject's behavior and convey action. Over time, you will develop your own personal style of photography and seek out the type of wildlife opportunities that suit your style. The lens you use (see Chapter 2, "Camera Settings and Shooting Techniques") plays a big part in the types of wildlife photographs you make. How close you are able to legally and comfortably approach your subject also impacts the type of image you capture. The location and season (see Chapter 5, "Location, Location, Location") you choose contributes to the types of behavior you are able to photograph, as does your proficiency with your camera.

ENVIRONMENTAL PORTRAITS

Environmental portraits include your subject in its surroundings, adding a storytelling element to your photographs. Images that show habitat provide additional information about the life of your subject and its habitat to those who view them. Additionally, they add a sense of scale between the subject and its world. You may find that your preferred style of photography leans towards including more of the environment, or you might be constrained to capture the overall scene due to the lack of extreme focal length (400–600mm). The same elements that go into making a great landscape image also make great environmental portraits—from lens selection to composition to depth of field. While photographing a Harbor seal in Alaska, I used a mid-range aperture to increase the depth of field, showing more detail in the background yet still keeping it slightly out of focus so that it complements the seal rather than competing with it for your attention (**Figure 4.6**).

NOTE

Although professional photographers work to capture all of the different aspects of wildlife, including portraits, most beginning wildlife photographers tend to start with environmental portraits due to lack of proper equipment (long lenses), lack of photographic skill, and lack of skills in tracking their subject.

FIGURE 4.6
Including the background in this scene of a Harbor seal adds a sense of place to the image.

FIGURE 4.7
As you move in tighter to a full-body portrait, the environment becomes less prominent. The sense of place is not as strong.

FULL-BODY PORTRAITS

Whereas environmental portraits provide a sense of place, a full-body portrait doesn't include as much of the surroundings, drawing your total attention to the subject. A tight composition allows you to notice greater details of your subject, such as the shape and size of the flippers on this Harbor seal (**Figure 4.7**) or the sausage shape of its body and the unique, identifying pattern that adorns it, making it unique from any other seal. I tend to use a fairly shallow depth of field when making full-body portraits to minimize any background distractions.

FRAME-FILLING PORTRAITS

Moving in even tighter, cropping out most of the body, and focusing on your subject's face brings you closer to feeling that eye-to-eye, soul-to-soul connection (**Figure 4.8**) with your subject. You can make out the texture of the Harbor seal's fur, the length of its whiskers, the way its mouth turns up at the corners giving it an endearing expression, and the deep, liquid black of its eyes. Being able to move in tighter and see such up-close details brings you closer to your subject (literally and figuratively). There's something about a bold, frame-filling, in-your-face image that can't help but draw you in.

FIGURE 4.8
In a frame-filling portrait, little to no background is included in the frame.

NOTE

In-your-face portraits can be made with short lenses by practicing a little patience and visiting locations where the wildlife is habituated to people.

GESTURE

A simple gesture brings your subject to life, making your portraits more dynamic. Gesture can convey curiosity, as in this image of a juvenile Roseate Spoonbill with its head tilted, leg raised, and poised to take that next step (**Figure 4.9**) as it pauses to look at me photographing it. Being prepared and on the alert while observing wildlife increases the odds of your capturing a fleeting moment.

Gesture is attitude; it can exhibit playful and loving behavior (**Figure 4.10**) or show aggression (**Figure 4.11**). There can be no question what certain gestures mean. Or, can there? The Mexican ground squirrel in **Figure 4.12** isn't really sticking its tongue out at me; it came to the water to drink and uses its tongue to lap up the water. Knowing animal behavior, I didn't quit shooting when it lifted its head from the pond. Most mammals will give you some tongue action when they're drinking water, and you are more likely to capture bathing birds at the same water source.

FIGURE 4.9
A juvenile Roseate Spoonbill keeps a watchful eye on me as it passes by.

FIGURE 4.10
Two coyotes nuzzling each other in a display of affection.

FIGURE 4.11
A coyote baring its teeth as another coyote approaches. The tail between the legs is a sign of submission.

ISO 200
1/350 sec.
f5.6
600mm lens
with 1.4X
teleconverter

FIGURE 4.12
The tongue makes all the difference between a basic portrait and one with gesture.

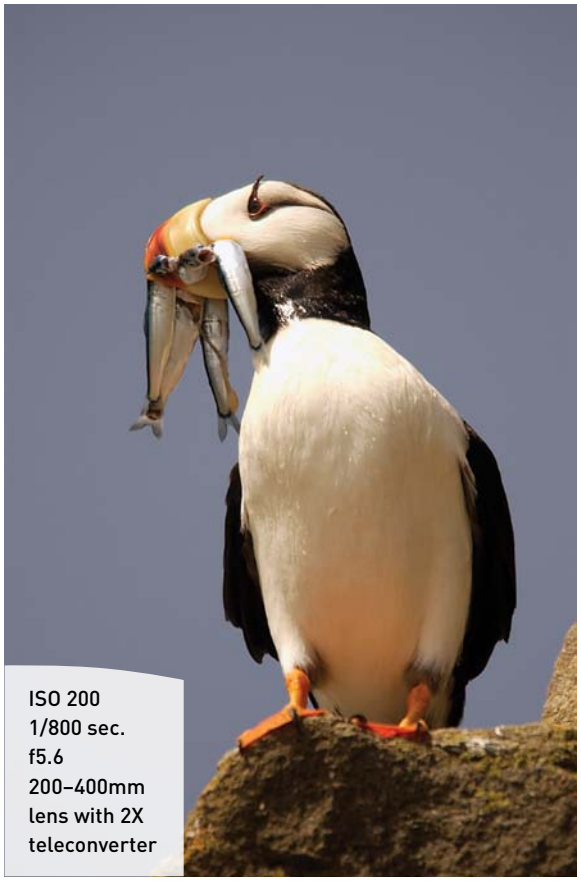


FIGURE 4.13
Anticipating that the puffin would land on the rock before disappearing into its nest, I was able to fire off six frames before it was gone.

CAPTURE BEHAVIOR

I like to photograph portraits as much as the next person, but to really get a sense of your subject, try to capture behavior shots that tell more about its personality and life. Behavior encompasses basically everything your subject does, from eating to sleeping, courting, mating, raising its young, and so on. The more you know your subject and its behavior, the greater the chances of success at capturing a decisive moment. I had mere seconds when a Horned Puffin landed on a rock ledge briefly with its beak filled with fish for its young before disappearing into a crevice in the rock where it nests (**Figure 4.13**).

Behavior is passed down from one generation to another. I spent an enjoyable afternoon with an American Oystercatcher and its chick one day in Florida photographing the parent teaching its young how to catch oysters. The parent would catch one, remove the shell, and then drop it back in the surf near its baby. The baby would then grab the oyster as if it had found it (**Figure 4.14**). Everything the adult oystercatcher did, the youngster would imitate. The experience provided hours of entertainment and great photographs. At one point the mom flapped her wings to rid herself of extra moisture; I aimed and fired, capturing the moment (**Figure 4.15**). And just as she finished, I turned to see the chick doing the same thing (**Figure 4.16**).

NOTE

The more time you spend in the field, the more you learn about your subject, and the greater the chances you have of capturing unique wildlife behavior.

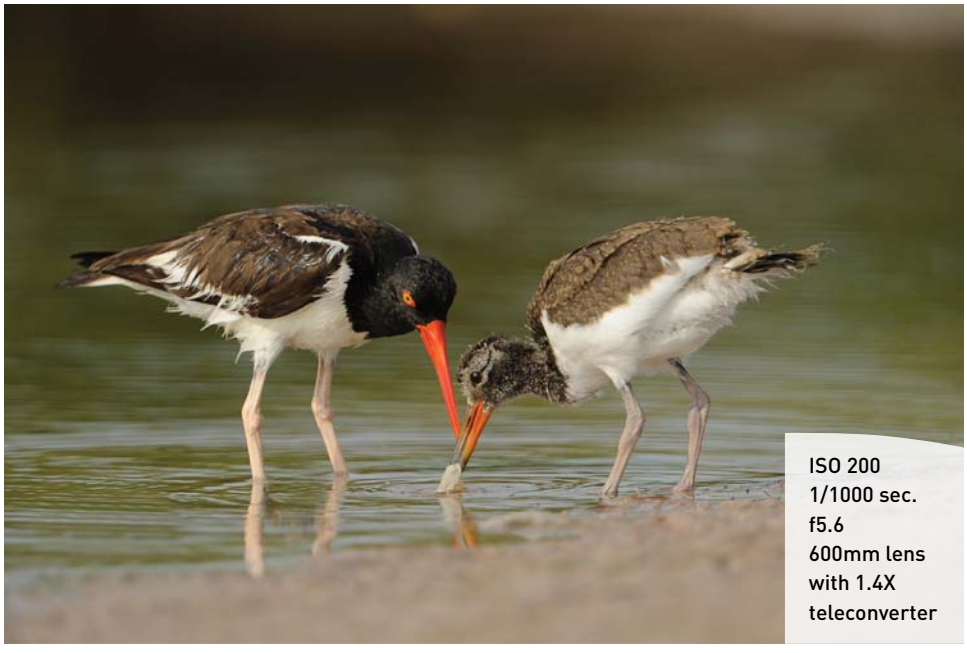


FIGURE 4.14
A mother oystercatcher teaching her chick to hunt for oysters in the surf in Florida.

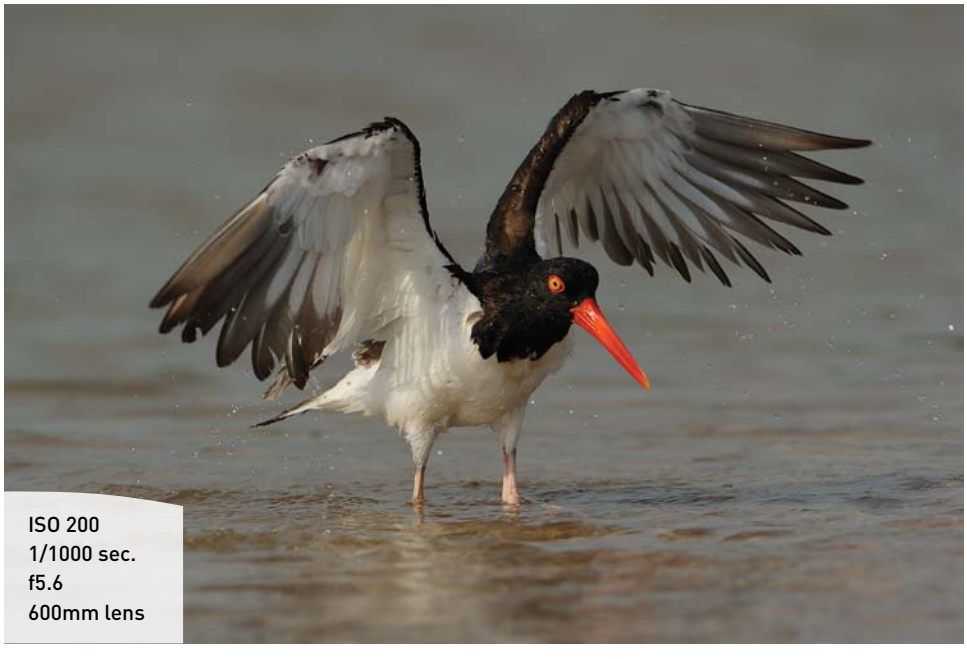


FIGURE 4.15
A fast shutter speed stops the spray of water in midair as an oystercatcher does a wing flap.

FIGURE 4.16
Learning from its mother through imitation, a juvenile oystercatcher sees its mother do a wing flap and does the same.

KNOW YOURSELF

It may sound strange to say know yourself, but you really have to know your own limitations as well as your strong points to get the most out of your wildlife experience. If you can't tolerate extreme cold, even when bundled up from head to toe (**Figure 4.17**), heading to Yellowstone in winter to photograph frosty bison (**Figure 4.18**) might not be the best plan of action.

You also need to consider how much weight you are willing and able to carry into the field and how long you are able carry it. Understanding your strength capabilities as well as weather tolerance in cold and heat, dry or humid conditions will enable you to plan your wildlife photographic adventures to locations that will yield the best opportunities for you. Your mobility will determine how far afield you can go, if you can get down on your stomach or knees to photograph small shorebirds at eye level, or whether you have to use distance and a long lens to even out the height difference of towering over small subjects.

ISO 400
1/80 sec.
f2.8
28–300mm
lens

FIGURE 4.17
A down-filled jacket and Windbloc fleece pants protect me from sub-zero temps in Churchill, Canada. Photograph by Greg Cook.

Wildlife photography is an exercise in patience. You may have to walk great distances to find a subject, or you may have to wait for hours watching a sleeping subject before it actually does something that provides you with more than portraits. Are you prepared to put in the time required to find your subject and then wait until you get not just any shot but great shots filled with behavior and action? If so, you can get to locations that few people visit. If you aren't able to make long treks with heavy gear, plan your adventures around locations where wildlife is accessible from the roadside or a short distance away.

FIGURE 4.18
Its thick coat protects a bison from the sub-zero temperatures and blowing snow that cakes its fur.

ISO 400
1/90 sec.
f4
200–400mm lens

Chapter Assignments

Take time to work through the assignments before you move on to best locations and seasons (Chapter 5) for finding the wildlife subjects that interest you.

Begin the Learning Process

Now is the time to begin to learn about the subjects that interest you. Start your wildlife library. Purchase your first book or DVD on a subject that is near and dear to you. Spend some time perusing the Internet in search of any and all information you can find. Become educated about one subject at a time.

Study Various Wildlife Images

Take time to look at many different wildlife images made by photographers whose work you like and respect. As you go through each photograph, try to figure out what you like or don't like about each image. Which images appeal to you the most? Do you prefer environmental or frame-filling portraits? Is action what gets you excited? Start to define your own personal wildlife photography style.

Self-assessment

Once you begin to understand the types of wildlife photography you want to pursue, take a good, hard, honest look at yourself and determine if you have the strength, the ability to handle the weather, and the patience to persevere until you get the shot.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

5

ISO 800
1/350 sec.
f5.6
600mm lens
with 1.4X
teleconverter

Location, Location, Location

THE WHERE AND WHEN OF SUCCESSFUL WILDLIFE PHOTOGRAPHY

Successful wildlife photography entails being in the right place at the right time. Sure, luck plays a big role too, but knowing when and where to go to find wildlife subjects increases your chances of a successful shoot. If there is no wildlife to be found, all the gear and technique in the world won't conjure up a great wildlife image. Careful planning and preparation on your part will help you to find the best locations for the wildlife you seek and the best times of year to go.

PORING OVER THE PICTURE

With temperatures hovering at freezing and below, winter wildlife photography is not for everyone.

Thanks to the foresight of our forefathers, we have national parks and refuges that preserve habitat for wildlife to roam, providing us with abundant photographic opportunities.

ISO 100
1/50 sec.
f11
17–55mm lens

Including more of the landscape in the frame adds a sense of place to this image of a lone bison.
Yellowstone National Park in winter provides you with the opportunity to photograph the harsh environment wildlife must contend with to survive.

PORING OVER THE PICTURE

Being in the right location in the right season will increase your chances of achieving a successful shoot.

Alaska in the spring is a great place and time to photograph nesting bald eagles.

ISO 400
1/750 sec.
f5.6
300mm lens

An adult bald eagle calls out to its mate with the dramatic mountains as a backdrop. Including part of the landscape gives your images a sense of place.
Utilizing proper hand-holding technique, I am able to photograph this bald eagle from a boat with my telephoto lens.

START IN YOUR OWN BACKYARD

Literally, your backyard is a great place to begin photographing wildlife. It's close, you are there regularly, and you can even entice wildlife to come to you by strategically placing bird feeders and water features (**Figure 5.1**). Not only will you get comfortable using your equipment, but you can make some great shots in your own backyard. By staging perches close to feeders and water features, you can even control where your subject lands prior to going to the feeder, which enables you to predetermine what your background will look like and what time of day the light is best for photography. Working the wildlife in your area provides you with hours of entertainment, observation, and practice so you are on top of your game when you head out on that once-in-a-lifetime adventure to distant locations to photograph exotic wildlife.

NOTE

Small birds can be very skittish; if you can become proficient at making images of the birds in your backyard without flushing them, you're well on your way to becoming a wildlife photographer.

FIGURE 5.1
A water feature is a great way to attract wildlife, like this Black-capped Chickadee, to your backyard.

FIGURE 5.2
A squirrel hangs upside down to better reach the fruit.

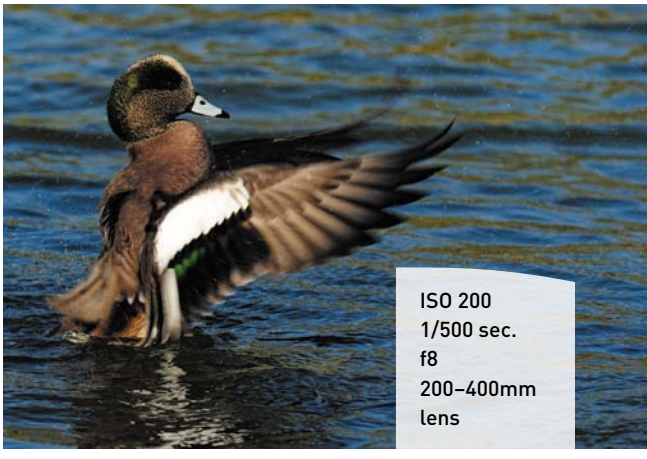


FIGURE 5.3
An American Wigeon flaps its wings to remove excess water after a bath.

LOCAL PARKS

Next, expand your backyard to include local parks, which also provide great opportunities to practice with habituated subjects. Most wildlife subjects at the local parks have become used to people so it's easier to practice your stalking skills. Learn where your subject's comfort zone is and what types of images you can get with the equipment you have without disturbing your subject. Squirrels are great subjects because they are small and quick, and their antics make for great shots (**Figure 5.2**). They'll also give you a good workout with your equipment. If there is a pond, you can count on birds being nearby. Find a bench to sit and simply observe your subjects. Notice how loud noises and sudden movements drive them away. But if you sit quietly, they will soon get used to your presence and will most likely wander within a photographable distance as they go about their daily lives (**Figure 5.3**).

ZOOS AND GAME PARKS

Once you have the hang of working with smaller wildlife subjects and are ready to move on to big game, head to your local zoo or game park to continue your wildlife photography education. One of the first facts you'll learn is that most wildlife is active early in the day and then again towards evening. Most animals like to rest in the midday heat (there are definitely exceptions to this observation, but it's a good barometer to start with). Because the light is usually best at those times of day too, that's definitely a plus for most wildlife photography. While you are practicing your wildlife photography skills at your local zoo, try different focal lengths to see just how wide you need to be to get a full-frame body shot (**Figure 5.4**). Then practice how close you need to be to get a frame-filling portrait at your longest focal length (**Figure 5.5**). A trip to the local zoo with a Nikon D300s and a 28–300mm VR lens enabled me to compare focal lengths at a given distance to my subject and to practice handholding at slow shutter speeds.

TIP

Fossil Rim Wildlife Center and Wildlife Safari also cater to photographers, offering special tours and hours for those interested in early entry or behind-the-scenes photo opportunities.

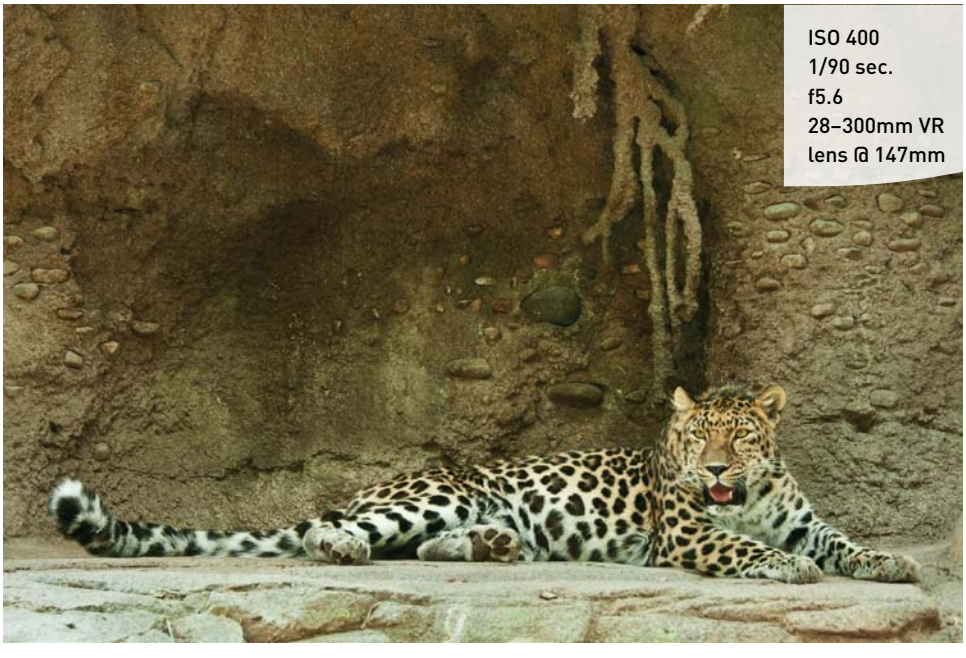


FIGURE 5.4
A zoom lens enabled me to back off and get a full-body shot of an Amur Leopard at the Hogle Zoo in Salt Lake City.

FIGURE 5.5
Using the same zoom lens, I was able to increase my focal length to its greatest magnification for a tighter composition.

Visiting a game park is a great way to prepare for going on a safari. Game parks are set up so that you are in a cage (car) while the wildlife roams free (within a large area), similar to what it's like when you're on a real safari in the wilds of Africa. The animals may be at a distance, or they may come right up to the vehicle (just like in Africa), so you'll need to learn to become proficient at quickly changing from a super tele to a mid-range lens to get the composition you desire at varying distances. In the process you'll learn the types of images that you can and cannot make from a vehicle. Some wildlife parks (Fossil Rim Wildlife Center in Glen Rose, Texas) have their own safari vehicles that are much like those used on African safaris; others (Wildlife Safari in Winston, Oregon) allow you to drive your own vehicle on designated roads.

NOTE

Photographing from a vehicle creates a new challenge of learning to keep movement to a minimum to avoid camera shake. You have limited range of motion to get your lens on your subject, and your camera support is aided only by the windowsill or hood of the car rather than a stable tripod. But with patience and practice, it is certainly a viable way to shoot.

WILDLIFE REFUGES

Wildlife refuges are scattered around the country and have been set aside as preserves for wildlife habitats. Bird populations and species vary depending on the season. During the winter, nonmigrating residents inhabit these refuges, as well as species that come to winter over from places farther north. When spring arrives, an entirely different bird population inhabits the refuge to nest and raise its young. Refuges are a great place to start your wildlife photography journey because you have great opportunities to photograph wildlife that is relatively habituated to people. Some refuges allow you to get out of your car and use ditches as a boundary between you and the wildlife; others have a policy that requires you to shoot from your vehicle. (Here is where the practice at a game park comes in handy.) Depending on the type of wildlife you are targeting, most likely a wildlife refuge exists that will serve as a great location to visit. For example, every year I lead a photo adventure to Bosque del Apache the first part of December (see "Fall" later in this chapter for more on Bosque). This is the peak time for photographing because tens of thousands of snow geese (**Figure 5.6**) and sandhill cranes winter over, feeding on the corn and alfalfa that is grown for them.

FIGURE 5.6
Bosque del Apache National Wildlife Refuge is home to over 30,000 snow geese and nearly 10,000 sandhill cranes each winter.

FIGURE 5.7
A small group is best when photographing wildlife to minimize the impact and stress on your subjects.

WORKSHOPS

You may want to go farther afield to photograph subjects that interest you but are hesitant to go alone. Whether it's the safety factor or simply the desire for the good company of others who enjoy the same pursuit you do, taking a wildlife photography workshop is a good solution. Workshops provide you with a great way to visit locations that have already been scouted out for the best season to visit and the hot spots, which saves you immeasurable hours of learning if you were to go on your own (**Figure 5.7**). If you decide to go the workshop route, do your homework to find the best fit for your style and interest. Find out how many people the workshop will host and how many instructors there are. Does the workshop focus mainly on shooting or is there some digital darkroom time allotted as well, and which do you prefer? If you admire the work of a particular photographer, try to take a workshop offered by that photographer. You'll be able to learn more about how that photographer captures such inspiring images. Talk to others who have taken workshops with the photographers you are interested in joining to see what their impressions were. Decide if you want attention and instruction or if you would rather be let loose to shoot on your own once you arrive at a location. It's all up to you. But the more time you spend with the instructors, the more you will get out of a workshop that you paid dearly to attend. Knowing ahead of time what to expect from a workshop will ensure that you find the right one to suit your interests and personality.

A YEAR OF SEASONS AND LOCATIONS

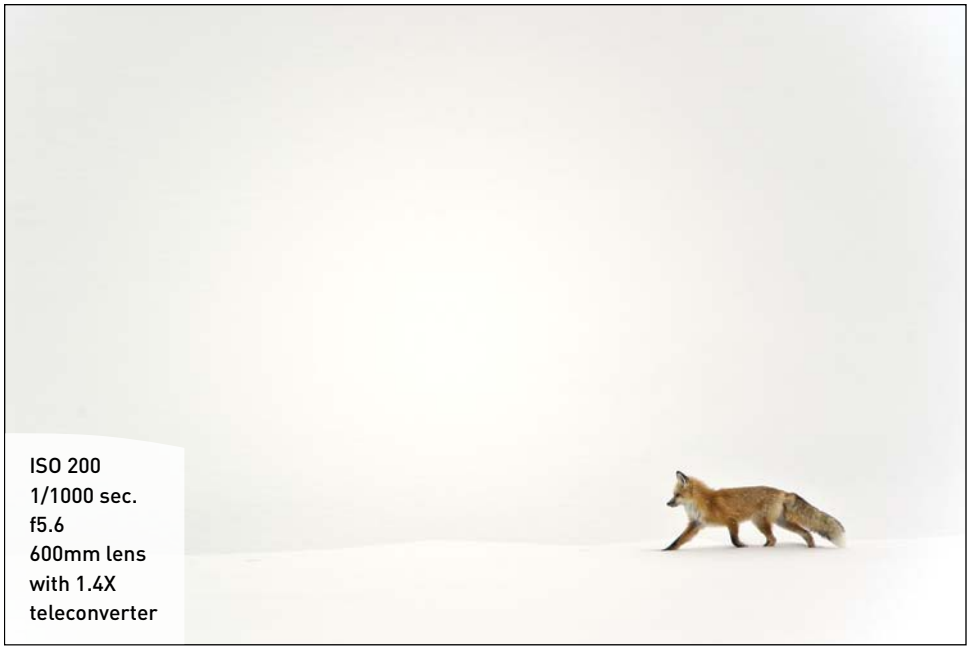
Locations and subjects have a best time or season to target them. Depending on the type of behavior you are interested in, you can find a great location and the best time of year to capture images that depict the behavior you're seeking. Just like knowing your equipment and your subject's behavior, knowing where and when to visit a specific location for the best photo opportunities—where wildlife is abundant and easy to approach at a safe, photographable distance—simply increases your chances of a successful shoot. Let's look at the locations I visit throughout the year, in which season I visit them, and why.

FIGURE 5.8
The warmth from its body, the humid air from the thermals, and the cold temps cause ice to build up on a bison's coat.

WINTER

I begin every year with a visit to Yellowstone National Park. With extremely cold temperatures that regularly drop into minus double-digit numbers on a regular basis, the world takes on an icy, stark beauty that makes a dramatic backdrop of the harsh environment that wildlife must endure to survive. It's not uncommon to find bison foraging for food around the thermal areas where the warm ground and steam melt the snow, giving them better access to the grasses. They are usually covered in snow (**Figure 5.8**) or frost because the moisture freezes to their coats in the cold air.

Heavy snow in the high country forces wildlife down to lower elevations to forage for food, making them more accessible to photographers. A fresh coat of snow simplifies a composition, making wildlife easier to spot because they stand out against the bright white backdrop (**Figure 5.9**). Add the charm of seeing most of the park in a snow coach (roads are closed to wheeled traffic in the winter months due to heavy snowfall) and your tolerance for extremely cold temperatures, and Yellowstone turns into a winter wonderland with abundant wildlife and few people; it's a must-visit location.



ISO 200
1/1000 sec.
f5.6
600mm lens
with 1.4X
teleconverter

FIGURE 5.9
A red fox passes by, paying us little attention as he focuses on the hunt.

COLD WEATHER TIPS

Camera equipment can handle the cold weather just fine. With a little preparation and care, you can photograph in the coldest temperatures without harming your equipment. Here are some suggestions and some of the measures I take to keep my equipment working in cold weather:

- I always carry a spare battery inside my jacket, close to my body, to keep it warm, because the cold temps exhaust batteries quickly. When one battery goes down, I switch them out and put the cold battery inside my jacket to warm up.
- I also carry a hand towel in my bag to pat dry any moisture on my camera and lens. If the weather is really wet, I'll cover my equipment with rain gear (see Chapter 1, "Equipment Essentials") to keep it dry while I continue to shoot.
- Before entering a warm room with my cold camera gear, I remove the batteries and cards so that I can begin charging batteries and downloading cards right away. I pack the rest of my camera gear back into my backpack. When I enter the room, I leave my camera inside the bag until it has had a chance to come to room temperature gradually, preventing condensation from forming inside the lenses or the viewfinder.

FIGURE 5.10
A Great Egret grows ornamental feathers, and its lores (the area around its eyes) turn a bright green during mating season.

SPRING

Spring comes early to the southern states, so I often head from the cold weather of Yellowstone to the warm, sunny beaches of Florida. No, not to work on my tan but to photograph the life cycle of birds, from mating behavior to nesting and the raising of chicks to fledglings. Many species are easily accessible to photographers all over the state. Over the years I have accumulated a list of places to visit for the greatest bird photography opportunities. Fort DeSoto, Fort Meyers, Tampa Bay, and the Everglades are longtime favorites to name a few. The great thing about Florida is that the season is so long. You can view birds every month of the year, but the best photography is during the spring through early summer, which is nesting time (February through July). The birds are at their finest in their breeding plumage (**Figure 5.10**). Their attention is focused on finding a mate and thus are easier to approach to photograph their behavior, like the pair of Royal Terns courting shown in **Figure 5.11**. The male catches a fish and presents it to the female. If she accepts it, it means she has accepted him as her mate. They will then build a nest, incubate the eggs, and raise their young together.

There is no shortage of wildlife to photograph in Florida: The locations are easily accessible; the birds are usually habituated to people, allowing for a closer approach; and it's a great locale in spring for the fair-weather photographer.

As spring nears its end and the temperatures climb into the high 90s or higher around mid-May through June, you'll find me in south Texas visiting some of the ranchers who have joined the conservation effort and have created water habitats for birds to visit in the hot, dry weather. The saying "If you build it, they will come" is a proven fact in south Texas where birds flock to the water holes in the hot summer months to refresh themselves with a drink or a bath (**Figure 5.12**).

The setup in south Texas is simple yet genius. Blinds are strategically set up near the water holes to optimize either morning or afternoon light and are at close proximity for frame-filling images of the birds that visit (**Figure 5.13**).

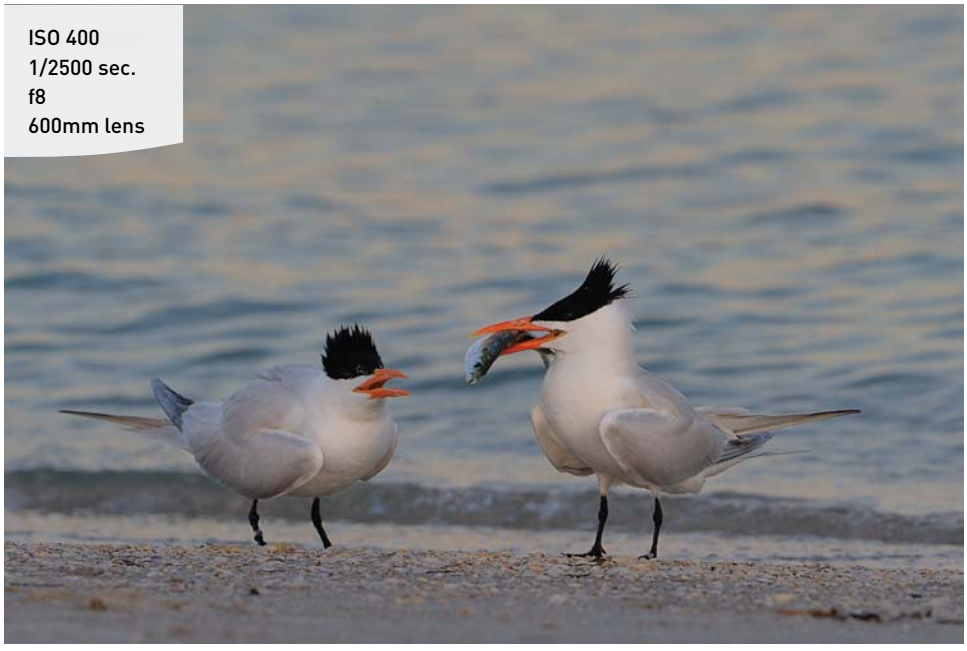


FIGURE 5.11
Royal Terns exhibiting courting behavior as the male presents the female with a fish.

FIGURE 5.12
A bath cleans and refreshes in the extreme heat of a south Texas spring.

FIGURE 5.13
A blind lessens the impact of your presence and allows you to set up much closer to your subject.

NOTE

Blowing sand and sea mist are hard on equipment. Using rain gear to cover your equipment during a blowing windstorm or near the surf will help maintain a happy, healthy camera that keeps on working. When you are drying your camera and lens, pat them dry, don't wipe. Wiping could force water into your equipment, causing condensation at the least and equipment failure at the worst.

ISO 400
1/35 sec.
f5.6
500mm lens
with 1.7X
teleconverter

SUMMER

A visit to Alaska in the summer is like having two springs. I enjoy the first one in the lower 48 and then get a chance to enjoy a second one in Alaska. Whereas spring comes early to the southern states, it comes late in the northern part of the country. As summer approaches, the wildlife in Alaska is just getting going. I spend the first two weeks in June in Alaska photographing courting birds (**Figure 5.14**); eagles with their chicks; otters (**Figure 5.15**); harbor seals with their newborn pups; and a species near and dear to my heart, the coastal brown bears (**Figure 5.16**). With the short summer season, wildlife in Alaska busily gets through an entire season in just a few short months. Flowers burst into bloom after the first few good weeks. Birds hastily search for a mate, nest, lay eggs, feed their hatchlings, and help them grow and fledge in time for winter's approach. It's a frenetic time of year.

FIGURE 5.14
Love is in the air in June as Pigeon Gillemots mate on the rocks.

FIGURE 5.15
Sea otters are shy and not easy to approach, but with the engine turned off we were able to coast to within feet of this guy without causing him to dive for cover.

ISO 200
1/500 sec.
f5.6
600mm lens
with 1.4X
teleconverter

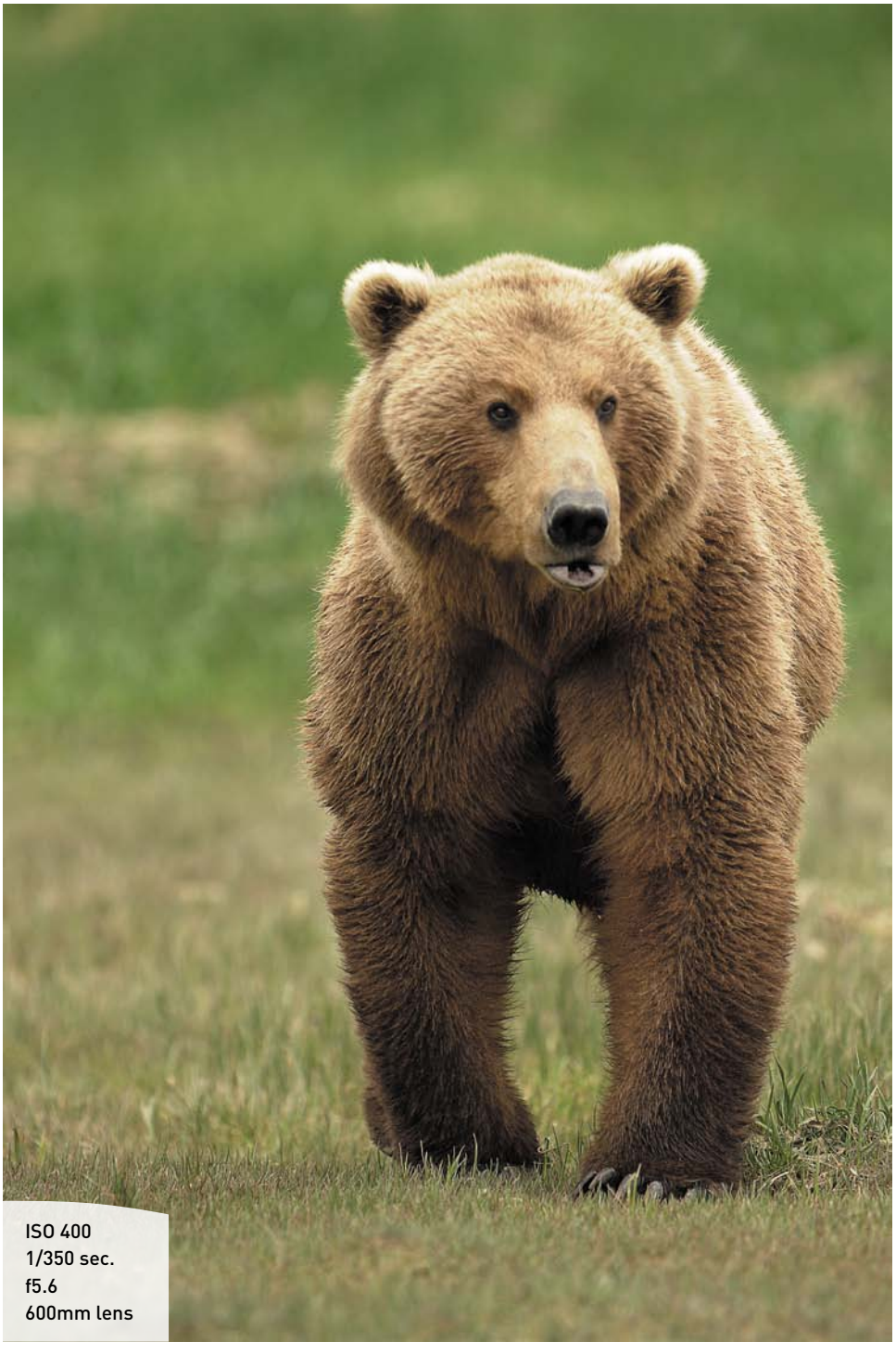


FIGURE 5.16
Coastal brown bears eat clams and sedge grasses in the spring. They show a remarkable tolerance of our presence and go on about their business, knowing we are there but paying little attention to us.

FIGURE 5.17
Skimmers working the surf for fish.

TIP

Being in top physical photographic condition is important when visiting Alaska due to the distances you travel over rough and sometimes slippery terrain, wading through thigh-deep water carrying heavy, expensive camera equipment.

July is a great time to head back to Florida (if you can stand the heat and drenching humidity) to photograph Skimmers with their chicks at their colonies on the beach. The parents catch fish by skimming the water with their lower mandible in the water, and when they feel a fish, their jaw snaps shut trapping the fish (**Figure 5.17**). They then bring the fish back to the young to eat (**Figure 5.18**). It's a wonder they ever find their own chicks in the confusion.

TIP

A roped-off area on Florida beaches is usually indicative of a nesting bird habitat.

FIGURE 5.18
Adult Skimmers feed their young live fish.

By midsummer, Spoonbill chicks have also grown to nearly full size, but their coloring is different, more pastel than that of their parents. Spoonbill adults leave the nest to forage for food and then return to feed their young. Chicks grab at their bills (**Figure 5.19**), causing them to regurgitate the food, which the chicks gobble up. When I see the youngsters grabbing at their parents bill, I have my lens aimed and ready to fire.

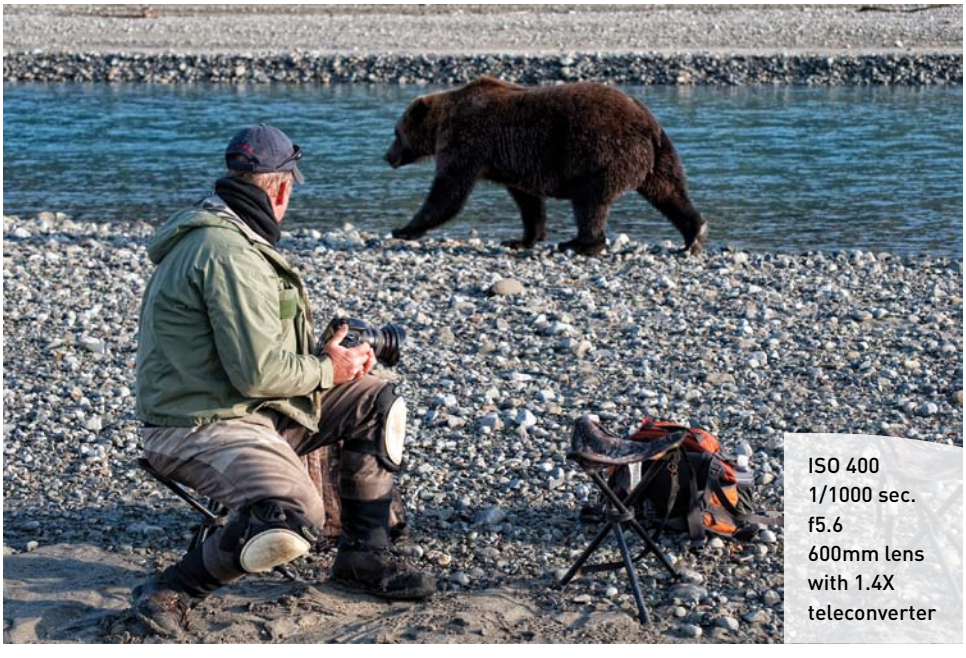
FIGURE 5.19
Hungry young Spoonbill chicks grab at their parent's bill to be fed.

August is considered by some to be prime time to photograph bears in Alaska when the salmon run. You can photograph bears running up and down the rivers right in front of your lens. I have to agree that it's quite the adrenalin rush to have an 800-pound grizzly running towards you full out as it chases a salmon (**Figure 5.20**). The focus at this time of year is primarily on the bears. If the fish are running, we plant ourselves at the river, and if the bears aren't there right then, we simply sit and wait for them to show (**Figure 5.21**). The bears wait all spring in anticipation of the salmon run when they can gorge on healthy, high-caloric fish to build fat reserves to sustain them over the upcoming winter.

FIGURE 5.20
A coastal brown bear charges upriver chasing fish.

ISO 400
1/1000 sec.
f6.7
600mm lens
with 1.7X
teleconverter

FIGURE 5.21
Sitting back from the water's edge gives the bear room to pass by as it fishes the river.

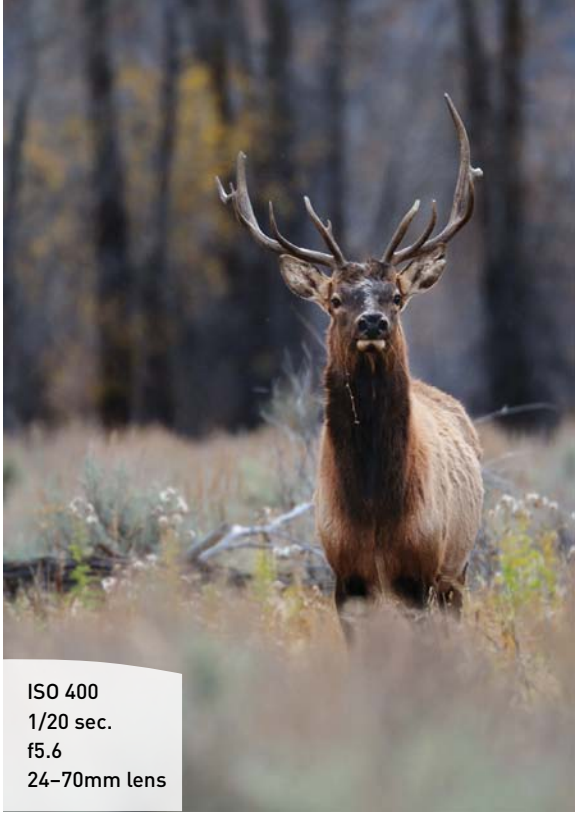


ISO 400
1/1000 sec.
f5.6
600mm lens
with 1.4X
teleconverter

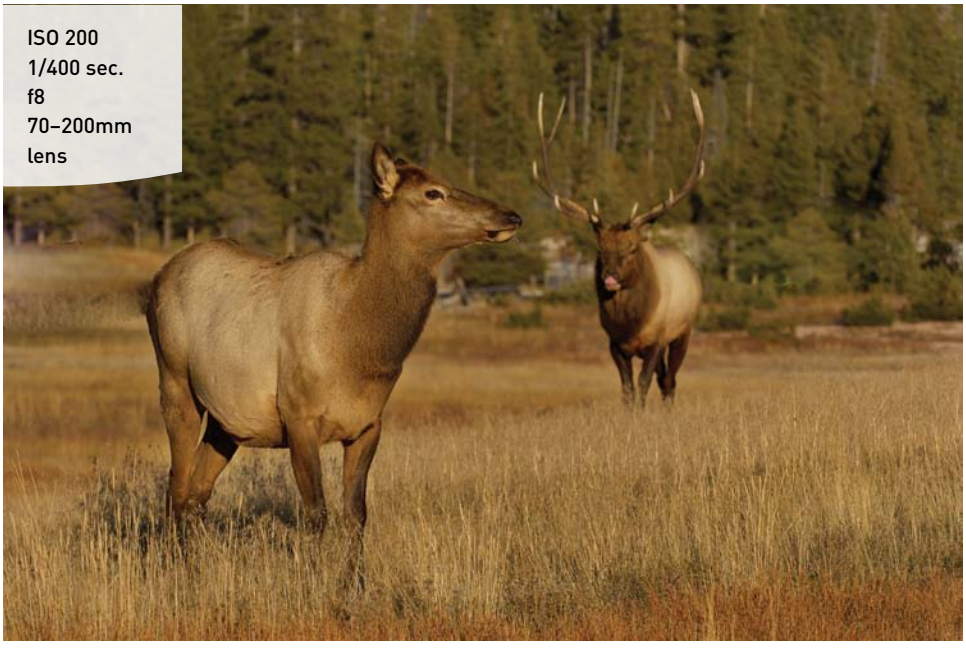
FALL

As fall approaches, the rut is at its peak. Bull elk are alert, agitated, and aggressive; they view anything as competition for their harem (**Figure 5.22**). You can witness posturing, bugling, and fighting, and the winner takes the prize. But he must keep the other bulls away at the risk of losing his harem. On and on it goes all through the fall. The harems gather in open fields where they graze together until it is time to reproduce. The bull will sniff the female and scent the air (**Figure 5.23**) with his lips to see if she is ready.

Bighorn sheep are also in prime condition as the fall rut approaches. They've spent the summer building their reserves to be the strongest bull so that they can win the rights to a harem. But they do all their posturing and fighting on cliff faces 100 feet above the ground (**Figure 5.24**).



ISO 400
1/20 sec.
f5.6
24–70mm lens



ISO 200
1/400 sec.
f8
70–200mm
lens

FIGURE 5.22
A bull elk in rut stares down the lens as he decides whether I am competition for his harem.

FIGURE 5.23
A bull elk curls his lips to scent the female during the rut.

FIGURE 5.24
Two bighorn sheep rams fight over a ewe that is in estrus.

As fall begins to wind down and winter approaches in the north, I head to Churchill, Canada, to photograph the great bear of the north—the polar bear. The bears begin to congregate on the shores of Hudson Bay in anticipation of the freeze-up, so they can head out to sea on the ice to hunt for the much-needed fatty food that seals provide. You can sense their restless energy as they patrol the water's edge to see if the ice is frozen and safe (**Figure 5.25**). Meanwhile, photographers also congregate on the shores of the Hudson Bay in Tundra Buggies. All have the same goal of seeing and photographing a polar bear (**Figure 5.26**). From the safety of the Tundra Buggy, you can experience polar bears up close and personal when they approach the buggy (**Figure 5.27**) to check you out. Photo opportunities abound when the bears become as curious about us as we are about them.

ISO 400
1/350 sec.
f5.6
24–70mm lens

FIGURE 5.25
A polar bear rests as it waits for the ice to freeze up on Hudson Bay.

FIGURE 5.26
Tundra Buggies are the mode of transportation for viewing polar bears in Churchill, Canada.

FIGURE 5.27
A curious polar bear approaches the buggy to get a better look at us.

ISO 400
1/350 sec.
f5.6
24–70mm lens

ISO 400
1/250 sec.
f5.6
600mm lens
with 1.4X
teleconverter

Dressing for the extreme cold temps is crucial for your safety as well as for your own comfort. You can't very well make a sharp image if you're shivering uncontrollably (**Figure 5.28**).

FIGURE 5.28
Your own comfort is important when photographing in extreme conditions. Dress for success when photographing wildlife. Photo by Greg Cook.

As the year winds down, I have one last stop to photograph wildlife before it's time to head back home. As mentioned earlier, I visit Bosque del Apache the first week of December each year to photograph the spectacle of tens of thousands of snow geese and sandhill cranes that migrate to the refuge in New Mexico to spend the winter. Words can't describe the sensory experience of your first morning's blast-off—the deafening sounds of thousands of geese and cranes calling out as they take to the air en masse (**Figure 5.29**). The feel of the air being disturbed by the number of wings flapping in unison and the sight of the sky darkening as the birds take flight, flying off to the cornfields for the day is an amazing sensory event. And if you are really lucky, put in the time (I've been to Bosque every year for the last decade), and are in the right place at the right time, you may get to experience *fire in the mist* (**Figure 5.30**). This phrase was coined by Arthur Morris when he saw the sunrise light the low-lying fog on the crane pools one morning.

Wildlife photography is about getting out there and making your own good luck through patience, persistence, and perseverance. Put in the time to learn your equipment, to know your subject, and to carefully plan your next wildlife photography adventure, and you'll bring home great shots.

FIGURE 5.29
A slow shutter speed accentuates the feeling of motion as the geese blast off from their roosting pond in the early morning light.

FIGURE 5.30
When all the elements come together—rising sun, mist, and backlit sandhill cranes—magic happens.

Chapter Assignments

Practice makes for good wildlife shots, and you can practice close to home to improve your skills. Take the time to work through the assignments before moving on to Chapter 6, "Getting Close Enough."

Backyard Habitat

Attach your longest lens to your camera and go out to your backyard or local park if you don't have a backyard. Find a quiet place to sit and observe the wildlife. When you see a subject you want to capture, take the first insurance shot before moving closer. When your subject gets used to your presence, work closer and make another image. Keep moving in towards your subject, watching its behavior to avoid stressing it into flight. Analyze your images to see how close you were able to get and how close to frame-filling you were able to compose with your equipment.

A Day at the Zoo

Not only will you learn a lot about your equipment and your technique when visiting a zoo, but it's a great way to spend an afternoon before heading out on a wildlife adventure. On your next day off visit your local zoo (local park if your city doesn't have a zoo). Work the various animals with the equipment you own. Determine what focal length will give you a full-body image and how tight you can get with your telephoto. Knowing your minimum focus distance, how close you need to be to different-sized subjects to fill the frame, and so on, you'll be prepared when it's time to click.

Plan Your Next Adventure

Even if it seems like a pipe dream to you right now, sit down and plan your dream adventure. Where would you go? What time of year is best? How would you get there? What would the accommodations be like? How much would your dream adventure cost? You never know; with careful planning and a little bit of savings, one day your dream may come true.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

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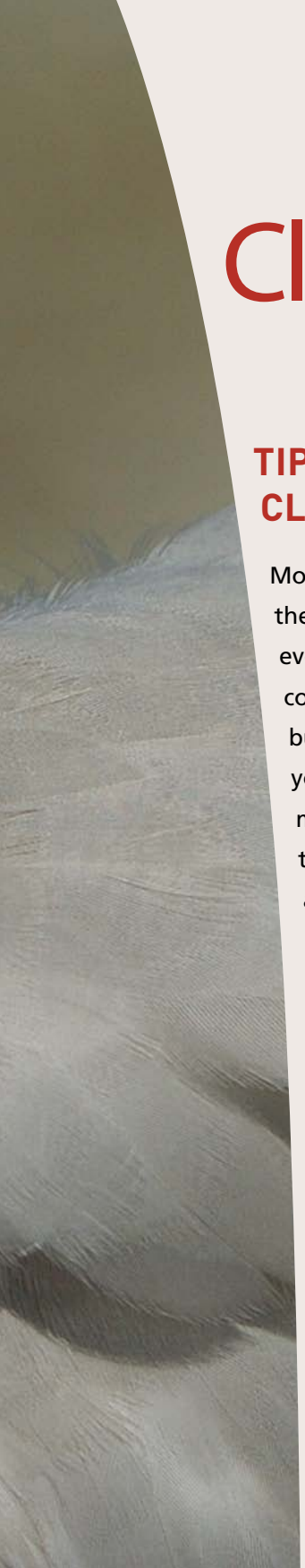
6

ISO 400
1/500 sec.
f8
600mm
lens with 2X
teleconverter



Close Encounters

TIPS AND TECHNIQUES FOR SAFELY GETTING CLOSER TO YOUR SUBJECT

Moving in closer for those in-your-face, frame-filling images of wildlife is the goal of many a wildlife photographer. Who doesn't want to capture every detail in the feathers or fur of a subject or that direct, soul-to-soul connection when wildlife looks into the lens? Each chapter in this book builds upon previous chapters with tips and information to help improve your wildlife photography. Getting closer to your subject will help you make more dynamic and interesting images, whether you achieve this through the use of longer lenses and attaching teleconverters or by actually moving physically closer to your subject. In this chapter, I'll explore the many techniques I use to get closer to my subjects.

PORING OVER THE PICTURE

The ultimate compliment wildlife can give me is to continue about its daily life unconcerned by my presence. A quiet and slow approach allowed me to get within frame-filling range of a sow and her cub.

Slowly approaching by boat until we were in photographable range was nonthreatening to our subjects.

ISO 200
1/500 sec.
f6.7
500mm lens

Over the course of a couple of weeks, we encountered this sow with her cub several times. She was a very tolerant mom and never exhibited any unease about our presence.

Using a telephoto lens enabled me to compose a frame-filling image of the sow interacting with her cub.

PORING OVER THE PICTURE

Bison (not buffalo) in Yellowstone National Park are habituated to cars. Being caught in a famous animal jam provided an up-close and personal opportunity to photograph a bull bison's face as he posed nearby.

Don't let that docile demeanor fool you. A bison can run at speeds up to 40 miles per hour and are known to charge when riled up.

Getting closer to your subject might involve using more than one technique. To capture this in-your-face, eyeball-to-eyeball shot of a bison, I photographed from the safety of my car using a telephoto lens to increase the magnification.

ISO 200
1/50 sec.
f5.6
200–400mm lens

If you cause your subject to charge or flee, you are way too close.

GETTING CLOSER THROUGH INCREASED MAGNIFICATION

One way to bring your subject closer is through the equipment you own (Chapter 1, "Equipment Essentials"). DX bodies with their small sensor increase the magnification by 1.5X/1.6X (crop factor). Adding a longer focal length lens to your system is another way to increase the subject size in your images. If you already have the long glass, try using a teleconverter to increase the focal length of your lens. You have several options to consider when trying to increase subject size in your frame.

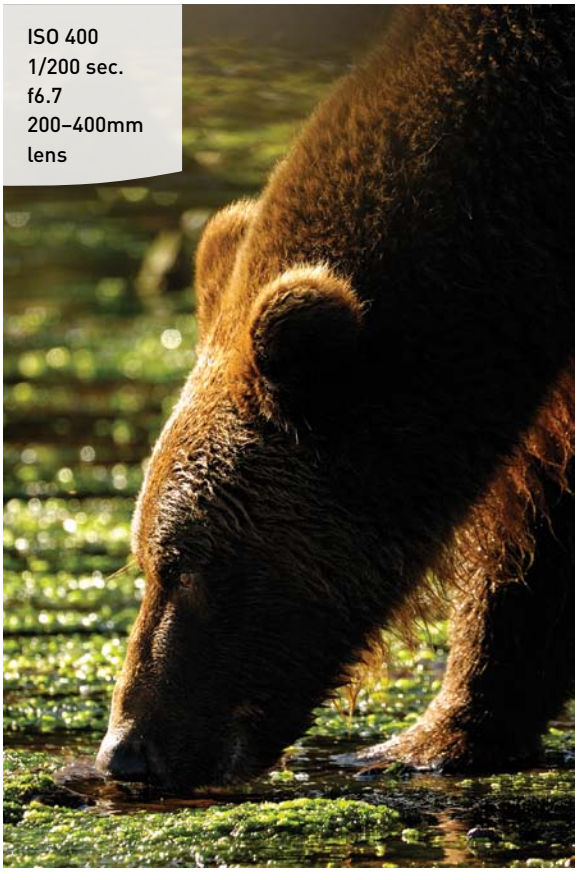


FIGURE 6.1
Using a DX body increased the magnification of my 200–400mm lens by 1.5X due to the size of the sensor.

DX BODIES

If you have a DX camera, you are already getting an increased magnification of 1.5X your lens's actual focal length due to the cropped sensor (**Figure 6.1**). DX bodies are popular among those who want greater magnification but can't afford the big glass. Because of the smaller sensor size, lenses are multiplied by 1.5X (Nikon) or 1.6X (Canon) to come up with the equivalent focal length on a DX body.

TELEPHOTO LENSES

Depending on your current lens selection, it may be time to step up to the next longer telephoto lens to bring your subject closer. Once you get into the super telephoto range (400mm and up), your lens choices are narrowed down to fixed focal length—400mm, 500mm, 600mm, and so on—which have fairly wide apertures (2.8, f4). This increased magnification and wide aperture allow you to capture frame-filling, peak-of-action images (**Figure 6.2**). Do a little research to find out which telephoto lenses are available for your camera within your budget and just how much you would gain in focal length and speed if you were to upgrade.

FIGURE 6.2
A fast super telephoto allowed me to get frame-filling head shots of a bear shaking off water as it emerges from the river.

TELECONVERTERS

If you already have a super telephoto lens, think about adding a teleconverter to increase your focal length even more, giving you tighter cropping (**Figure 6.3**). Nikon and Canon offer teleconverters that are designed to match specific lenses for the best performance. The 1.4X teleconverter works well with lenses that have an f4 maximum aperture, and the 1.7X (Nikon) or 2X teleconverters are fully compatible with telephoto lenses of 2.8 or wider apertures.

FIGURE 6.3
Adding a 1.7X teleconverter to a 600mm f4 lens resulted in the equivalent of a 1000mm f6.7 lens.

Third-party lens companies also offer teleconverters that fit most lenses but are not as sharp as those designed by the camera manufacturer. Plus, when they are mounted to a lens with a maximum aperture of 5.6 or less, autofocus is lost, not to mention the loss of light that may cause your shutter speed to drop into the blurring range when you don't want that effect. I tend to shy away from third-party teleconverters for these reasons.

GETTING CLOSER PHYSICALLY—BLINDS

Whether a super telephoto lens is in your future or not, shooting from blinds is another way to get closer to your subject. Some subjects are more nervous than others; small birds, for example, take flight at the slightest sound or movement. Shooting from an established blind that is placed near an active wildlife crossing to using your car, a buggy, a boat, or even a canoe as a blind are all good techniques for close-ups. By camouflaging your human shape, you can often get closer to wildlife than if you approach it on foot.

PHOTOGRAPHING FROM ESTABLISHED BLINDS

The ranches I visit in South Texas provide established blinds near water holes that are frequented by many different species of birds during the hot spring months. Wildlife is attracted to water to drink and to bathe. By strategically placing a blind near a water hole (**Figure 6.4**), you can photograph from a much closer range than normal. The blind camouflages your shape and minimizes movement, preventing birds from flying away. Permanent blinds can be quite comfortable for the photographer (**Figure 6.5**) as well as have room to set up chairs, a table for your binoculars, a bird book and notebook, and so on.

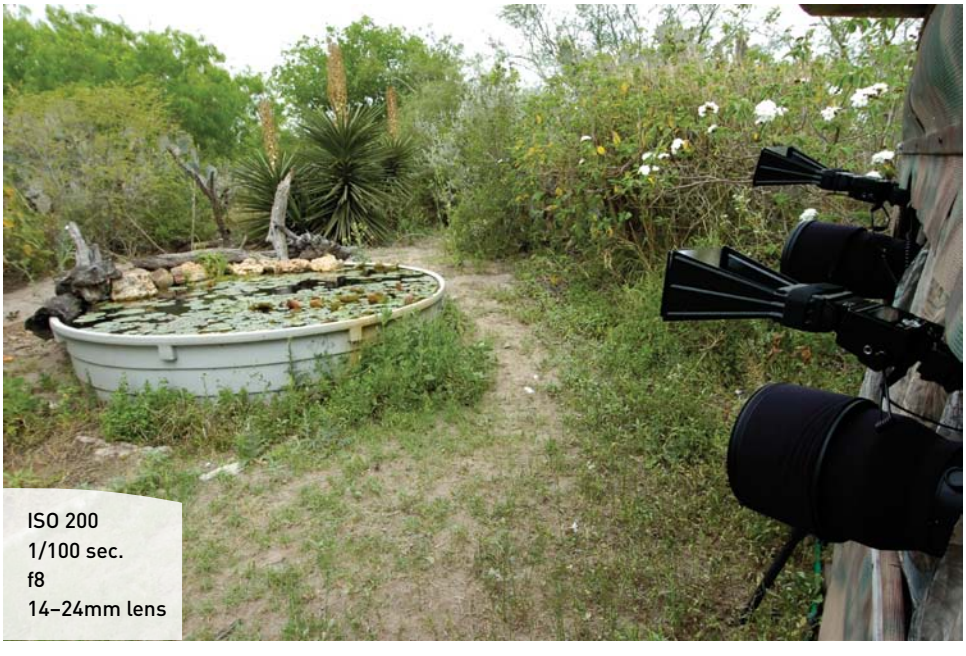


FIGURE 6.4
Shooting from a blind minimizes human impact on wildlife.

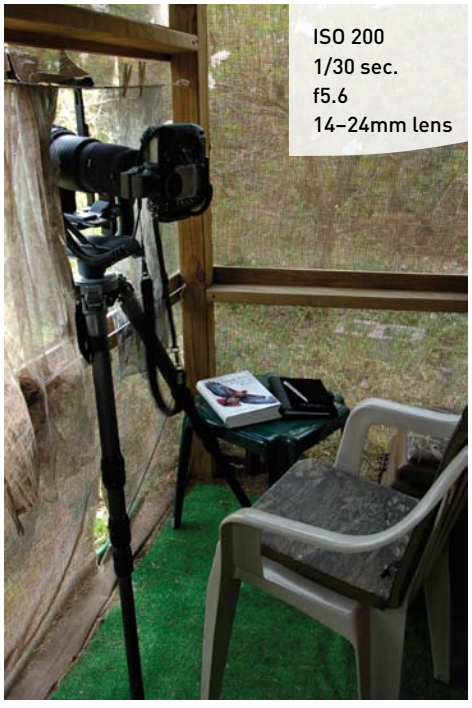


FIGURE 6.5
Permanent blinds have room to set up a chair and some comforts for the long haul.

FIGURE 6.6
A Hooded Oriole lands on a perch to scan the area for danger before dropping down to the water.

Once you have settled into the blind and the birds don't sense movement or hear noise for a while, they will resume their activities and provide you with many photo opportunities (**Figure 6.6**).

NOTE

Drink plenty of water when photographing in hot conditions. It's easy to become dehydrated, which will shut down a photo shoot in a big hurry.

YOUR CAR AS A BLIND

Your car can serve as a mobile blind at many refuges and parks. Wildlife becomes accustomed to vehicles, yet will flee at the first site of a person out of the car. Several window-type mounts (**Figures 6.7** and **6.8**) can aid you in shooting from the car window or rooftop. They include beanbags, an L.L. Rue window mount, and a Puffin Pad, to name a few.

FIGURE 6.7
The Puffin Pad is a high-density, rigid foam construction that is designed to hug the window. A Walt Anderson panning plate is attached to the lens foot.

FIGURE 6.8
Many window supports are available to choose from depending on whether you are shooting from a window or the roof of a safari vehicle.

A normally shy American Kestral (**Figure 6.9**) posed for me as I photographed it from my car window using an L.L. Rue window mount at Bosque del Apache National Wildlife Refuge. You can exit your car and photograph from the side of the road at Bosque, but some of the birds are better photographed from the car because they feel less threatened.

ISO 400
1/800 sec.
f6.7
600mm
lens with 2X
teleconverter

FIGURE 6.9
An American Kestral perches on a metal bar to better see his prey.

TUNDRA BUGGY

When visiting Churchill, Manitoba, to photograph polar bears, you travel around in a Tundra Buggy. Its giant wheels safely maneuver the trails out to Hudson Bay where the bears congregate each fall waiting for the bay to freeze up so they can continue their journey out to sea. Although there are places where you can photograph polar bears one-on-one, I prefer the safety of the Tundra Buggy. Not only can you photograph the bears with no fear for your safety, but they come right up to you, giving you point-blank, close-up photo opportunities.

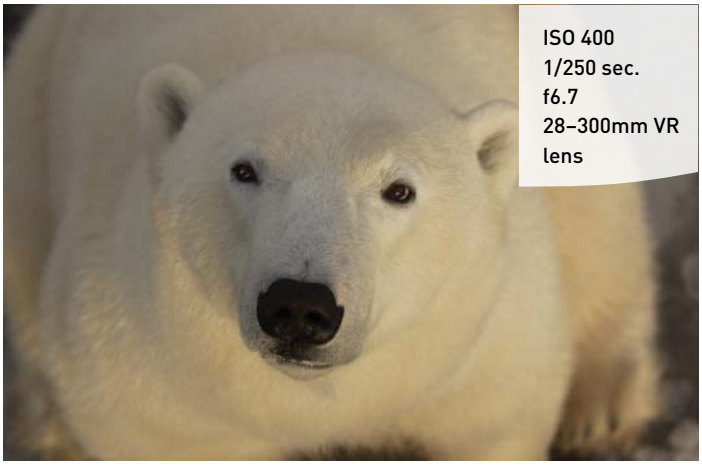


FIGURE 6.10
A curious polar bear checks out a photographer while a buggy full of tourists looks on.

Close-up opportunities that would be impossible without the buggy include head shots (**Figure 6.10**) to paw details (**Figure 6.11**). A short zoom lens mounted on a second body lies on the seat next to me ready for close encounters such as these.

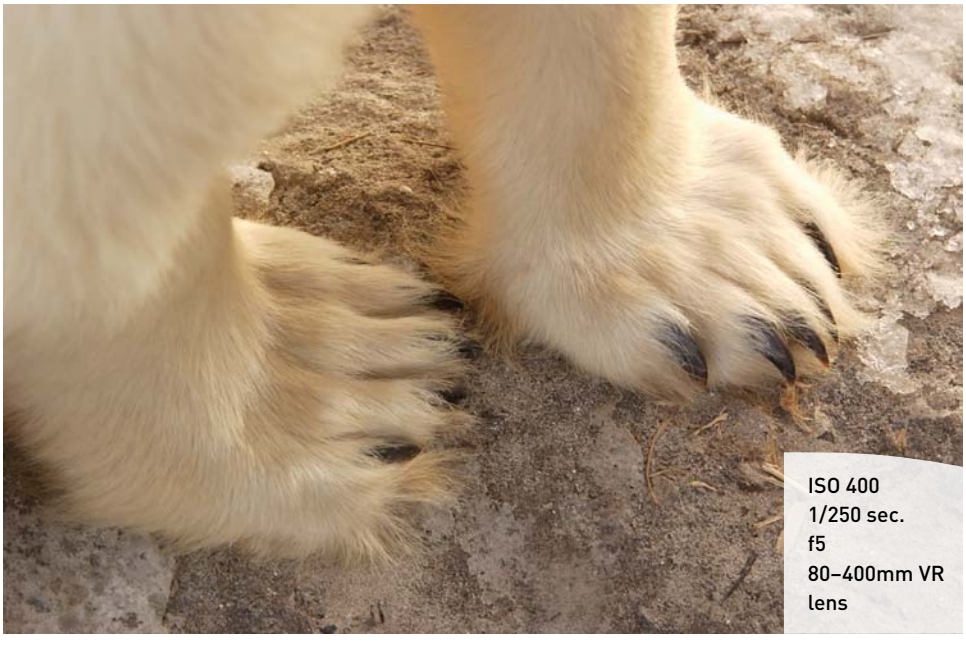


FIGURE 6.11
Look for the detail shots when your subject is up close, like the furry paws of a polar bear.

APPROACH BY BOAT

The only way to approach some subjects is by boat. Harbor seals (**Figure 6.12**), sea otters, and Black-legged Kittiwake, to name a few, all live either in the water or on offshore rocks. To photograph them, you must go to them by boat. Some wildlife allows you to approach it, and other wildlife flee when you get too close. The key is to approach to within photographable distance while not disturbing your subject. It's a win-win situation when you come home with great shots without negatively impacting the wildlife by your presence. This increases the chance of future photographers having the same experience one day. A kayak (**Figure 6.13**) is even less threatening than a motor boat. With its low profile, it gives you eye-level (**Figure 6.14**) access to your subjects.

FIGURE 6.12
A Harbor seal allows a close approach by boat to make frame-filling portraits.

FIGURE 6.13
Approaching wildlife slowly and silently in a kayak is less threatening than in a motorized boat.

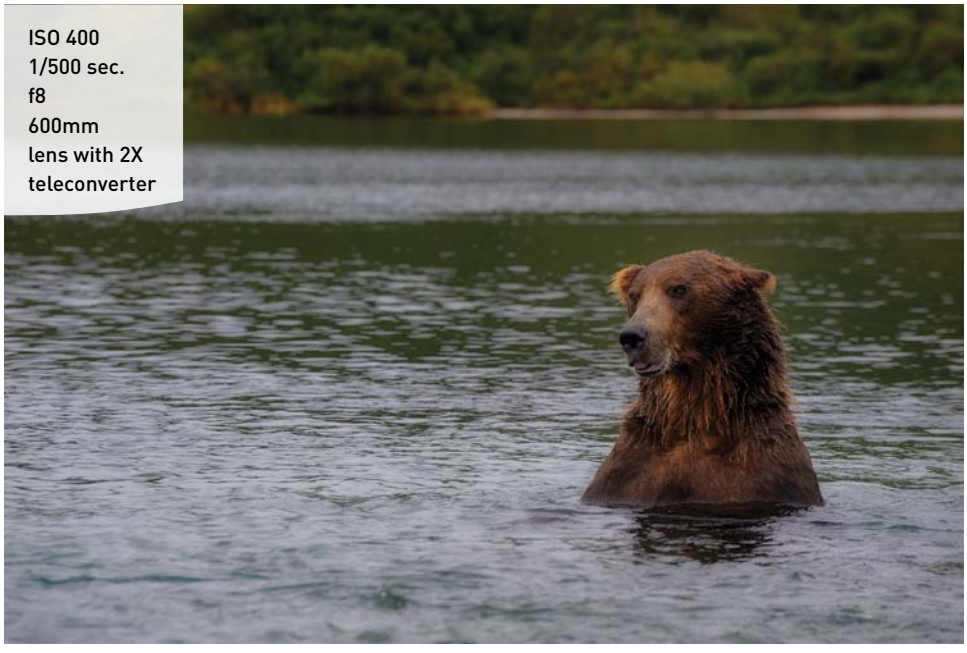


FIGURE 6.14
A fishing bear pauses to check us out before diving back under the water in search of fish carcasses.

GETTING CLOSER PHYSICALLY—SLOWLY AND CAREFULLY

Truly, the greatest thrill is that of the hunt—to be in the wilds with your feet firmly planted on the earth seeking out your subjects using knowledge and wit. But as stated earlier, you must approach them in such a way that they know you are there yet continue on doing what they do with little concern. With knowledge of your subject and visiting locations where there is an abundance of wildlife that is habituated to humans, you, too, can approach some wildlife and get in the close-up zone (**Figure 6.15**).

FIGURE 6.15
A curious squirrel pauses to check me out while I click the shutter to capture its cute pose.

I always get set up well before I approach wildlife so I am ready to capture a spontaneous moment as it unfolds. Once I've found a subject, I get the insurance shots: I photograph it for the first time from a photographable distance and include the environment in the first few frames. When the background is as beautiful as that in Alaska (**Figure 6.16**), the insurance shots are great shots in their own right.

After giving the subject some time to get used to my presence and when it seems to be comfortable, I begin to move in closer. I call my approach red light, green light, moving when the subject is looking away and stopping when it looks in my direction. I continue in this manner until I am within the range I need to get frame-filling images of my subject (**Figure 6.17**).

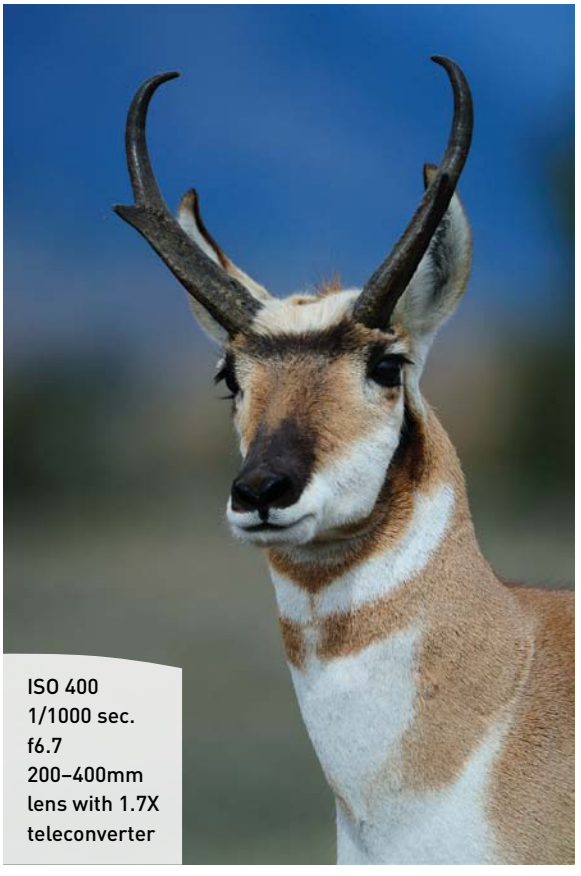
When approaching many wildlife subjects, a zig-zag approach is less threatening than a direct line. Keeping my head down and moving closer, I made an indirect approach towards a Pronghorn while it watched me. When I got within range, he actually walked towards me, filling my viewfinder even more (**Figure 6.18**).

Watch for signals from your subject that you are getting too close: ears back, tail raised, rump flared, and so on. Know the signs of distress that your subjects exhibit

FIGURE 6.16
The insurance shots are the first series of clicks I make when approaching wildlife.

ISO 200
1/320 sec.
f2.8
400mm lens

FIGURE 6.17
A slow, steady approach brought me within frame-filling distance of a Bighorn ram.



ISO 400
1/1000 sec.
f6.7
200–400mm
lens with 1.7X
teleconverter

FIGURE 6.18
A curious Pronghorn actually closed the distance between us as he came closer to check me out.

so that you can avoid causing them to flee at your approach. Be patient, move slowly, and make as little noise as possible. You'll find that you can get closer to your subject than you had originally thought.

NOTE

Avoid noisy clothes. The sound of your legs scratching together as you walk is a sure signal to wildlife that you are there.

Be sure to understand and follow the rules, and you'll be rewarded with great shots of the wildlife you encounter.

Chapter Assignments

Approaching wildlife to capture successful shots takes awareness, good judgment, and patience. With planning and practice, you'll improve your close-up photography skills without affecting the behavior of your wildlife subjects. Be sure to complete the following assignments to increase your proficiency.

Get Closer with Your Longest Lens

Give it all you've got—focal length that is. With your longest lens mounted, go into your backyard or to a local park and try to approach the birds and squirrels. Chances are they will be somewhat habituated and will let you get fairly close. See just how much of the frame you can fill with your subject. Pay attention to your body, and avoid any sudden noises or movements.

Get Closer Using a Blind

Pitch your tent in your backyard to use it as a blind. Set it up near a feeder or other location where wildlife visits, and take a chair with you to sit it out for a few hours. When you first set up the tent, the wildlife will be a bit skittish, but soon they'll get used to it. Then you can go inside, and with the door open, set up to photograph whatever comes near. Even though you are not as visible in the tent, remember that wildlife can still hear or smell you. You must be very quiet, even in a blind.

Get Closer with a Slow and Careful Approach

Try to sneak up on your pet. That's right; you need to sneak up on your pet and get a shot before it awakens from the sound of the shutter. You'll be surprised at how well your pet hears when you think it is dead to the world. OK, some of you might not have pets, or your pet might be able to sleep through an earthquake. If so, try this exercise on someone else's pet. A friendly pet works best.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

7

ISO 200
1/750 sec.
f8
600mm lens

Creative Composition

BASIC GUIDELINES FOR IMPROVING YOUR PHOTOGRAPHIC COMPOSITION

Composition defined is the pleasing arrangement of the elements that make up a photograph within the frame. Many suggested guidelines are available to help you learn the art of good composition, from leading lines, patterns, and shapes to depth, subject placement, and camera angle. Perspective, background, even or odd numbers, and spatial relationships also play a part in effective composition. The art of directing your viewers' eyes through the frame to your subject in the most direct path is a skill that takes time to master. Knowing the rules, and even more important, knowing when to break them will take your image making from snapshots to great shots.

PORING OVER THE PICTURE

Following the rule of thirds and placing the subject in one of the four power quadrants is an effective compositional technique.

Ripples in the water draw the viewer's eye to the subject.

Leaving the bird fairly small in the frame adds a sense of scale, offering the viewer an idea of the grebe's size.

ISO 1600
1/500 sec.
f8
600mm
lens with 2X
teleconverter

The warm colors of the Pied-billed Grebe and its background complement each other.

PORING OVER THE PICTURE

Odd numbers of subjects generally make better compositions than even numbers. They break up the tendency to pair up even numbers and draw your viewer's eye through the frame. Composition with even numbers has a more static feel to it.

Shallow depth of field is used to make the subjects pop. (The wider aperture also resulted in a stop-action shutter speed.)

Shape is a strong compositional element. The triangle shape that the three snow geese form keeps the viewer's eye moving within the frame.

The complementary colors of the geese and the corn fields add an overall pleasing warmth to the scene.

ISO 200
1/250 sec.
f4
600mm lens

USING LINES, SHAPES, AND PATTERNS

Lines, shapes, and patterns bring a sense of visual harmony to an image. Leading lines direct your viewer's eye to the subject; shapes and patterns in nature can give your image balance.

LINES

Lines provide the most direct route to your subject. Lines can be vertical or horizontal; they can be diagonal or even S-shaped. Vertical lines convey a sense of strength and power. The reeds in **Figure 7.1** provide a bold background of vertical lines that complement the blues of the water. The reeds also tell viewers a bit about the habitat of the subject, which uses the protection of the reeds to nest and raise its young. Diagonal lines also evoke a feeling of power, plus they add a sense of motion in the direction they travel. **Figure 7.2** illustrates in its simplest form how a simple grass stalk leans in a diagonal direction and leads to the Says Phoebe perched at the top. The simplicity of the composition keeps your eye on the intended subject.

FIGURE 7.1
A Common Moorhen stands out in contrast against the green reeds in the background.

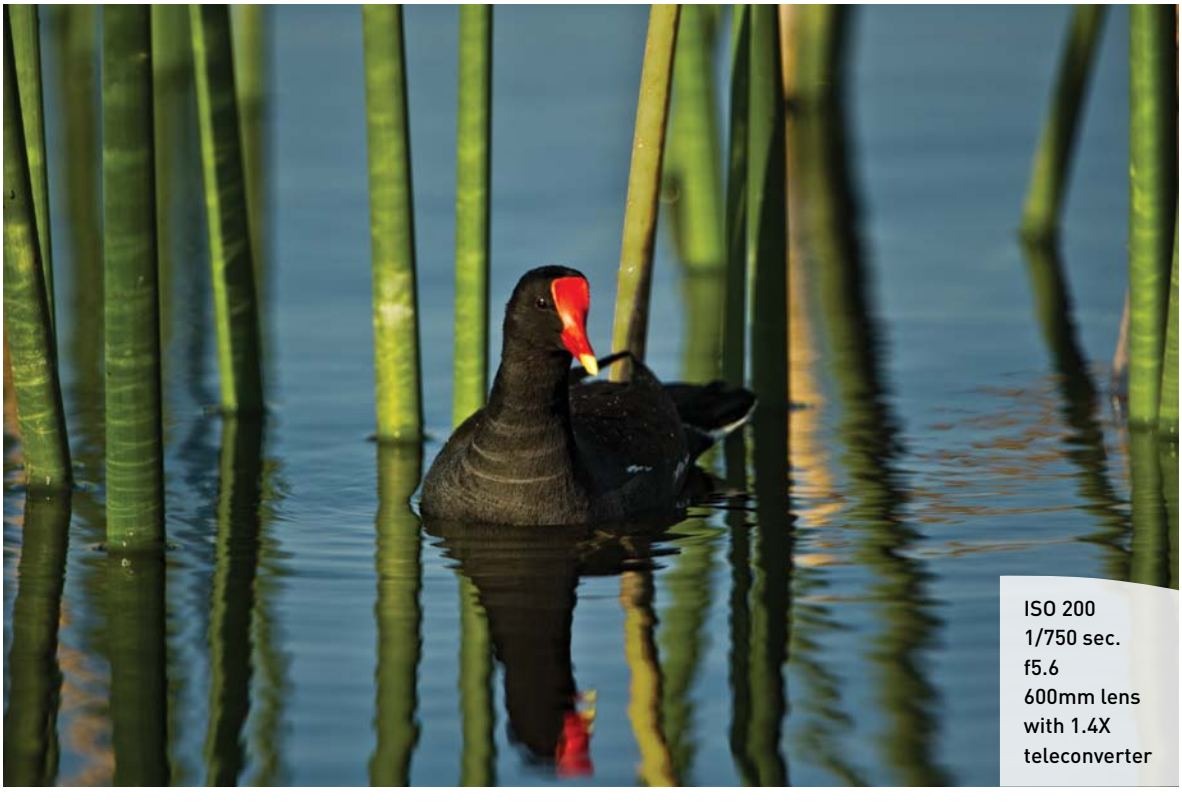


FIGURE 7.2
A stalk of grass provides a perch for the bird as well as a diagonal line leading to it.

FIGURE 7.3
A Great Egret is captured in a graceful pose as it displays its finery to attract a mate.

An S-curves provides a gentler meandering path to your subject. An S-curve conveys a feeling of peace and well-being, a slower pace, and grace. A Great Blue Heron stretching for nesting material is a thing of pure beauty as its body curves gracefully (**Figure 7.3**).

Converging lines create a vanishing-point effect, adding visual depth to your image. While photographing in Bosque del Apache, I discovered a lone sandhill crane walking between the rows of corn (**Figure 7.4**). The rows lead to the crane, framing it between them and then recede off into the distance. The converging lines, shallow depth of field, and color contrast collaborate to make the crane stand out among the corn.

FIGURE 7.4
A sandhill crane poses between rows of corn. The converging lines lead to the crane and then recede into the distance, giving the image visual depth.

ISO 200
1/750 sec.
f5.6
600mm lens
with 1.4X
teleconverter

SHAPES

Shapes make great compositional elements, and you'll find many shapes in nature. A sleeping bear takes on a triangular shape, which leads your eyes from his face, along the ground to view his paws, up his legs to his elevated rump, and down the slope of his back to his face once again in a closed shape that keeps you and your viewers engaged with the subject (**Figure 7.5**).

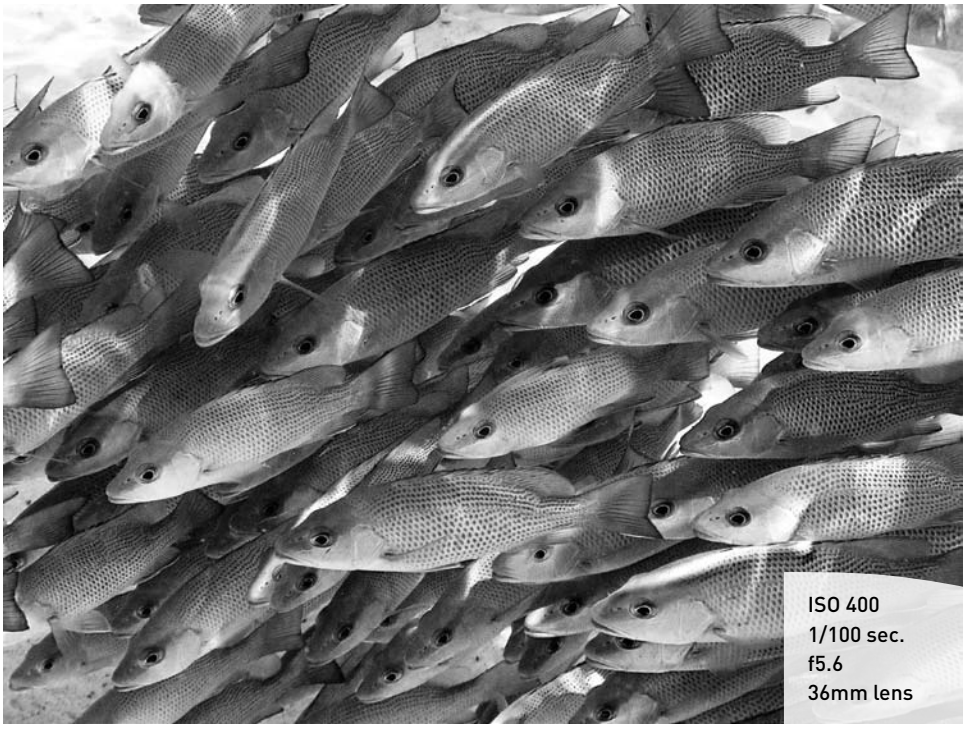
ISO 400
1/350 sec.
f8
600mm lens

FIGURE 7.5
A polar bear pauses to take a nap and naturally falls into an engaging pose.

PATTERNS

Repeating patterns in nature give an image a graphic feel. When photographing groups, look for patterns when all the subjects turn or look in the same direction. A school of fish swimming in a tight formation creates an interesting graphic of shapes and lines, resulting in a repeating pattern (**Figure 7.6**). The tight formation of the fish and the shadows and light all work toward the feeling of a huge school of fish as far as the eye can see.

FIGURE 7.6
A school of fish swims close together to create a pattern of bullet shapes heading from right to left. (An underwater housing was used in the making of this image.)



FRAMING YOUR SUBJECT

Framing is a common practice in landscape photography that fills in empty space and draws your viewers towards the subject, and it can be used in wildlife photography to draw your attention to the subject in the same manner. Framing can incorporate foliage or it can be part of your subject. In **Figure 7.7**, an adult Great Egret protectively hovers over her young chicks, framing them with her neck. It's a natural path along the gentle curve of her neck to her head where the direction of her gaze takes your eyes to the chicks.

CREATING PERSPECTIVE

Your perspective or camera angle plays a big role in how you present your subject to your viewers. Photographing a Snowy Plover at eye level (**Figure 7.8**) means lying on your stomach in the sand and surf to see your subject and its world from its point of view.

FIGURE 7.7
A telephoto lens with a wide aperture and the Great Egret framing her chicks draw your eye to the chicks and keeps it there.

FIGURE 7.8
Getting down low so that I was at eye level with the Snowy Plover enhanced its reflection in the water.

On the other hand, capturing a bird in flight requires tilting your camera and your head towards the skies to capture the graceful soaring of a Snail Kite in flight (**Figure 7.9**) as it hunts for snails. Turning your camera skyward provides a different perspective that works well with birds in flight but can result in exposure issues. A bird's underwings can become underexposed and dark against a bright sky. Dialing in plus exposure compensation against a bright sky will brighten the image so you can see the feather detail in the bird's wings.

FIGURE 7.9
Aiming upward at a Snail Kite provides a sense of height as it flies by.

TIP

Don't just shoot from your standing height. Get low, get high, look up, look down, and move around to find the best perspective for your subject and what you want your images to convey.

CONCEALING TO DRAW ATTENTION

It is often said that what you conceal is just as important as what you reveal within an image. Using shadow and light is a good way to reveal what you want your viewers to see and conceal the rest within the shadows. The coastal brown bear in **Figure 7.10** was feeding on a moose carcass that had washed up. He was in the recess of a rock, and bright light was hitting the rock face—a real exposure nightmare. I dialed in minus exposure compensation to darken the rock face, throwing all but the bear's face into shadow and hiding the gore of the dead moose. The image draws viewers' attention to the bear's face. Concealing most of the bear adds a certain drama and mystery to the image.

FRAME FILLING VS. ENVIRONMENTAL SHOTS

The lens you select determines your photographic style (Chapter 2, "Camera Settings and Shooting Techniques"). Do you select a mid-range wide to telephoto lens when photographing wildlife to include the environment, or do you pull out your biggest gun to photograph a frame-filling face? Each image tells its own story. It's up to you to decide which story is most interesting to you and your viewers. An environmental portrait of a herd of bison milling around the thermals of Old Faithful (**Figure 7.11**) using a mid-range zoom lens to include the background and a smaller aperture for increased depth of field provides your viewers with more information about the location where the image was made and your subjects' habitat. Environmental portraits are storytelling compositions.

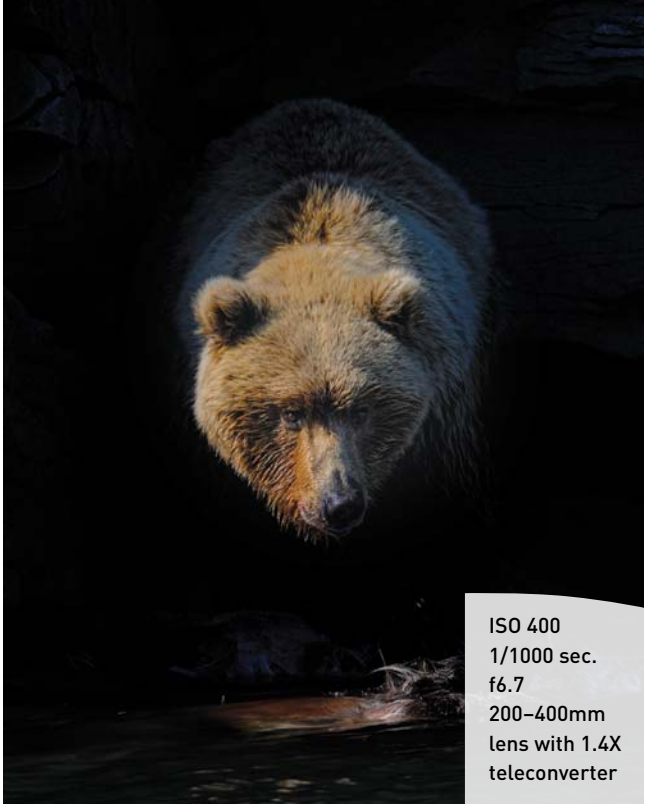
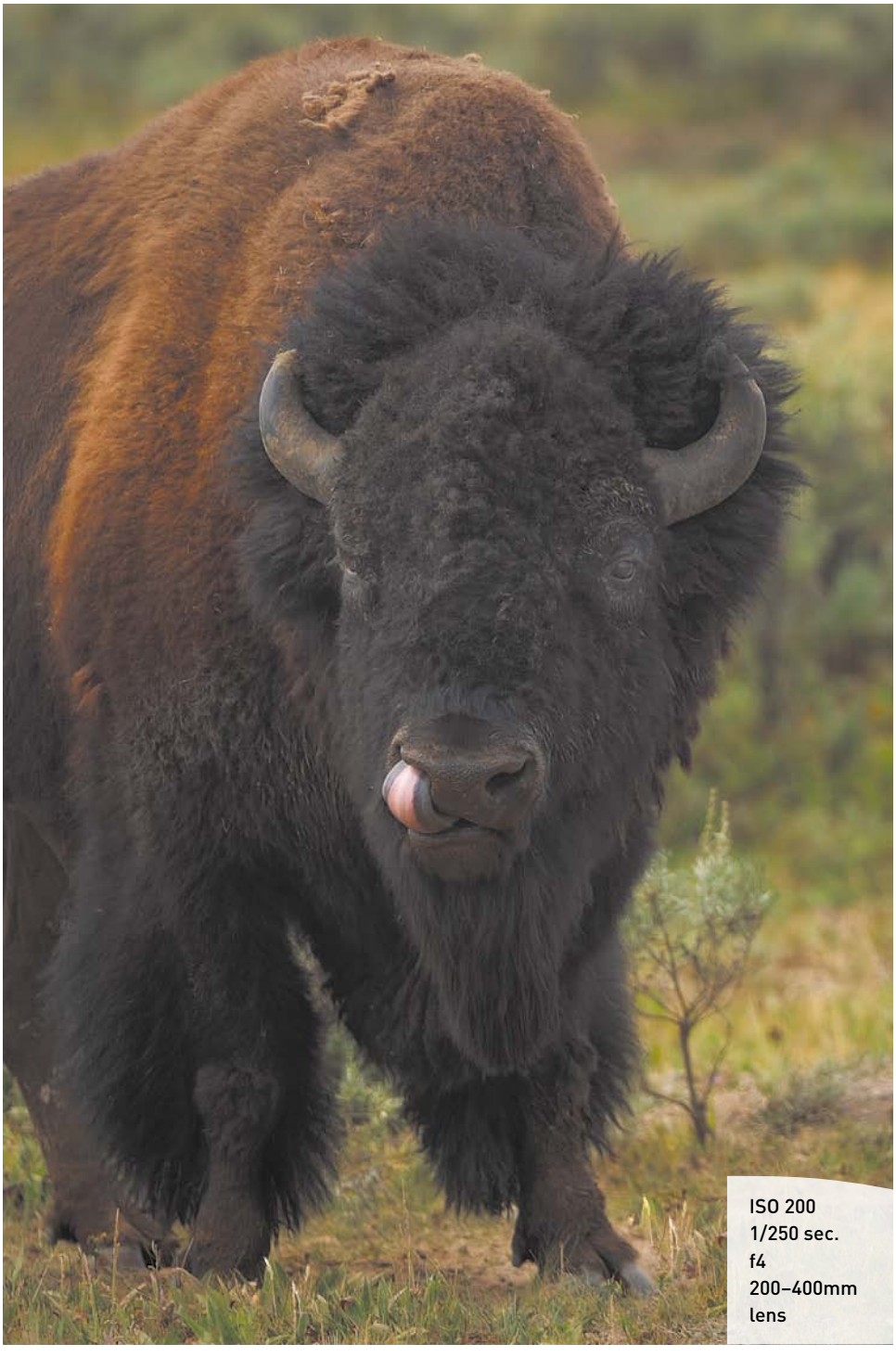


FIGURE 7.10
Underexposing the image hides all but the bear's face as it emerges from a rocky recess.

FIGURE 7.11
Bison use the heat of the thermals for warmth and to find exposed grasses to eat.

FIGURE 7.12
Frame-filling compositions eliminate distracting elements from the background.



For a more intimate composition, try filling the frame with your subject. You can create frame-filling images by moving in closer to your subject (Chapter 6, "Close Encounters") or by increasing the image size with a telephoto lens (**Figure 7.12**). Background distractions are minimized, keeping all of your attention on the subject.

Moving in tighter on your subject for an in-your-face shot provides greater detail and more information about the subject. The proximity of your subject connects with you on a more intense level in an eye-to-eye composition (**Figure 7.13**).

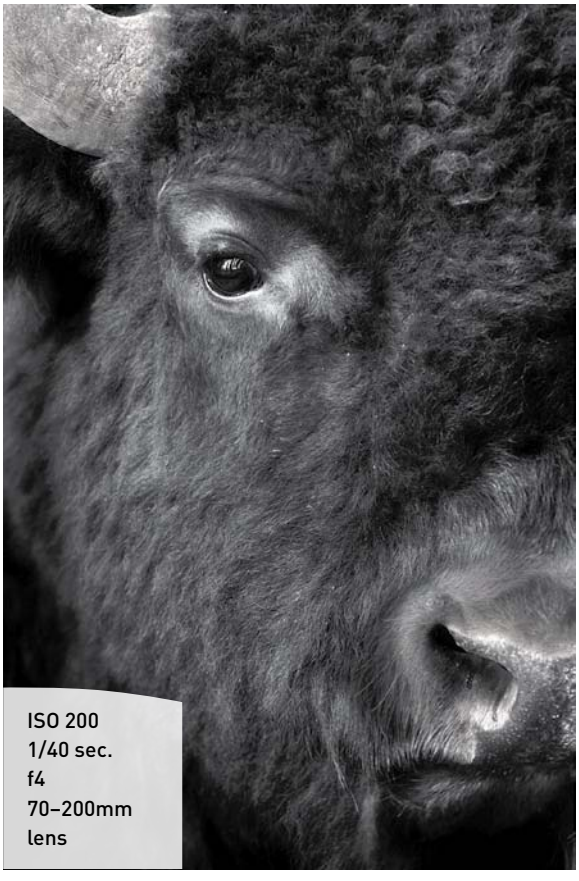
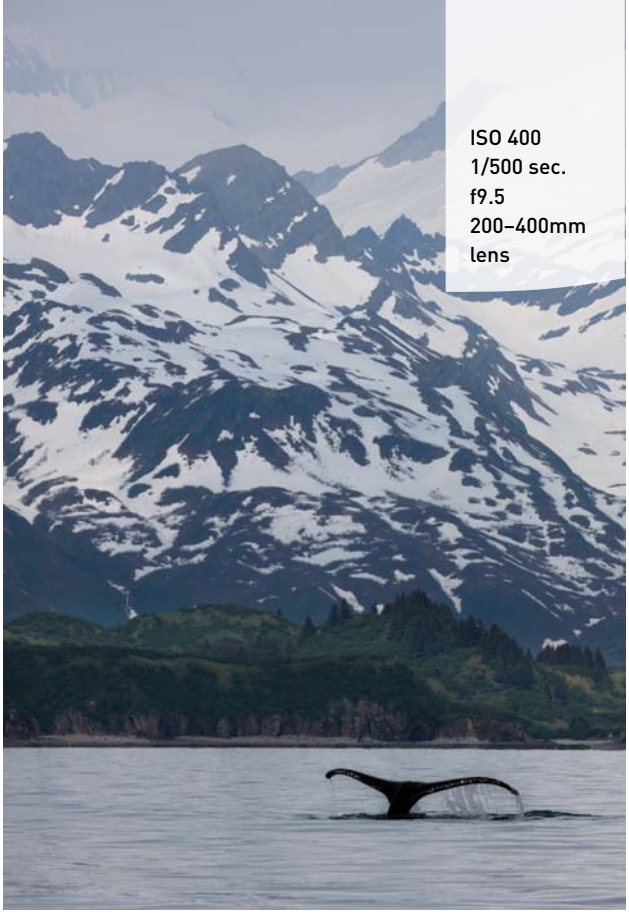


FIGURE 7.13
The diagonal line from the bison's nose to its eye draws the viewer through the frame to lock onto the intense stare.

INCORPORATING BACKGROUND

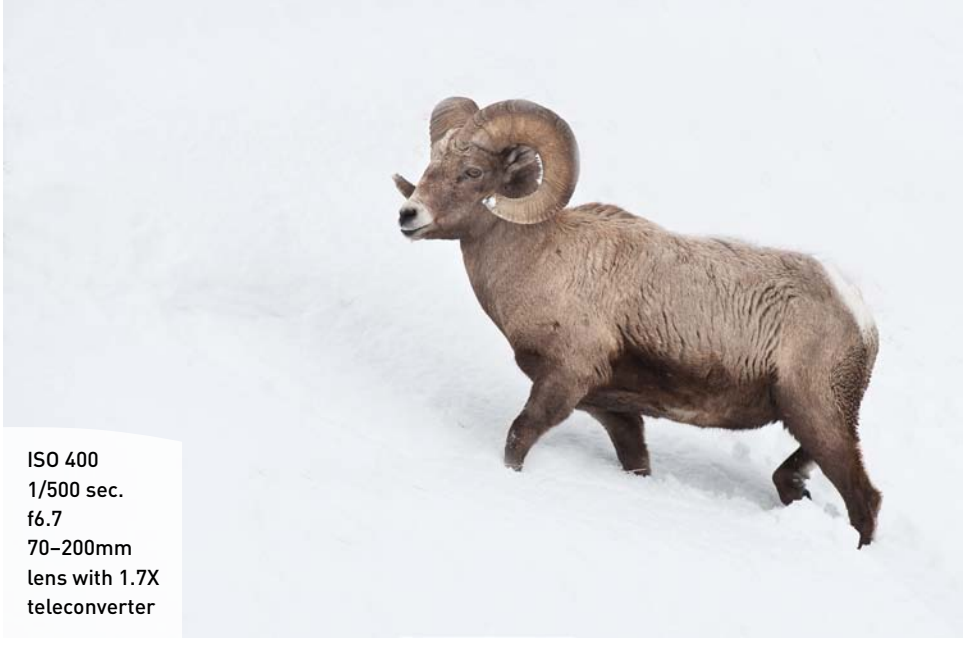
Including more background in an image adds a sense of place to the story. With the subject smaller in the frame and a closed-down aperture for increased depth of field, the background appears sharper and more detailed. A whale fluke by itself is a dramatic image, but by zooming back to include more of the environment, you give your viewers clues to the location, which is part of the storytelling element of image making (**Figure 7.14**).

A wider aperture and tighter composition diminishes the background, throwing everything out of focus and providing a diffused color palette that complements your subject rather than competing with it for your viewers' attention (**Figure 7.15**).



ISO 400
1/500 sec.
f9.5
200–400mm
lens

FIGURE 7.14
A whale goes into a dive with snow-covered mountains as a backdrop.



ISO 400
1/500 sec.
f6.7
70–200mm
lens with 1.7X
teleconverter

FIGURE 7.15
A Bighorn sheep stands out against the snowy background.

APPLYING THE RULE OF THIRDS

The rule of thirds is the basis for strong compositions in photography. If you divide an image into nine equal segments, the four intersecting points are called power points. When an image is placed within one of the intersections, it becomes more balanced and pleasing to the eye. Placing the snow goose (**Figure 7.16**) in the upper-left power point as it flies into the frame not only gives a sense of balance, but it also lends height to the goose, emphasizing flight.

FIGURE 7.16
The distant mountains add to the sense of height that the placement of the snow goose provides.

On the other hand, getting low and placing an approaching grizzly bear in the lower-left power point enhances the impression of power and strength (**Figure 7.17**).

Rules are meant to be broken. But to successfully break them, you must understand them in the first place. Knowing the rule of thirds and the placement of your subject in one of the power points gives your images a feeling of symmetry, equilibrium, and rhythm. Placing your subject in the center of the frame can be one of the most powerful compositions if the subject fills the frame and makes a bold statement, as **Figure 7.18** illustrates.

FIGURE 7.17
The blurred background adds to the feeling of visual depth.

FIGURE 7.18
Breaking the rules and centering your subject can make a dramatic composition.

Chapter Assignments

Applying what you learned about composition in this chapter, take some time to work through the assignments to get a better understanding and feel for what makes a good composition.

Move in Tighter

Beginning photographers have a tendency to compose more loosely and include more than is necessary in the frame. Using the techniques you learned in Chapter 6, compose your image, take two or three steps closer to your subject (if you can do so safely), and then recompose your image. Take a before and after shot to compare the difference a few steps closer can make in the impact of your images.

Look for Lines, Shapes, and Patterns in Your Images

Using leading lines in nature draws your viewers' eyes to your subject. Shapes and patterns add a graphic element to an image. Look through your existing images. Have you used leading lines to create a path to your subject? Are there shapes and patterns that make up pleasing groupings or graphics in your images? Then go out and consciously look for these elements the next time you are photographing. Nature is full of lines, shapes, and patterns that add interest and create more compelling images.

Rule of Thirds

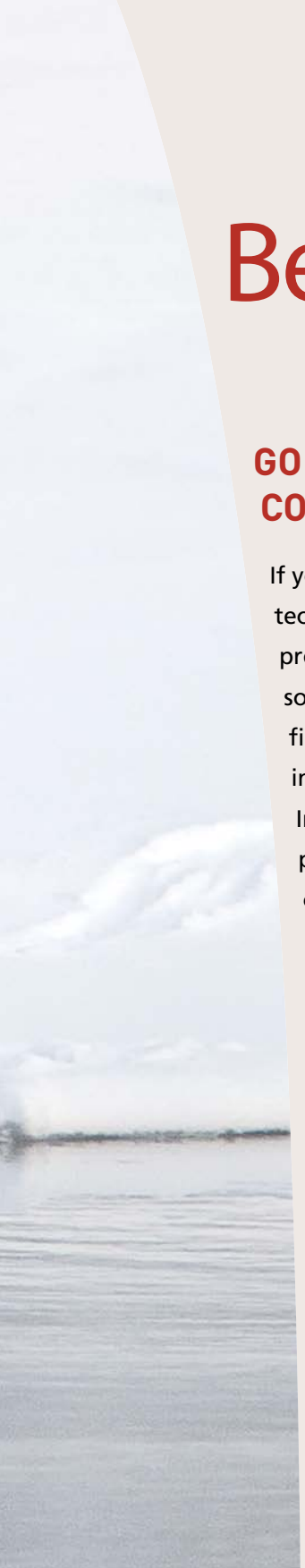
Using the rule of thirds, make four photographs placing your subject in each of the power intersections, and then compose the image so the subject is dead center. Do this several times with different subjects, and then compare the images to see how moving the subject in each frame leads your eye to your subject.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

8

ISO 200
1/1250 sec.
f9.5
600mm lens
with 1.4X
teleconverter



Beyond the Basics

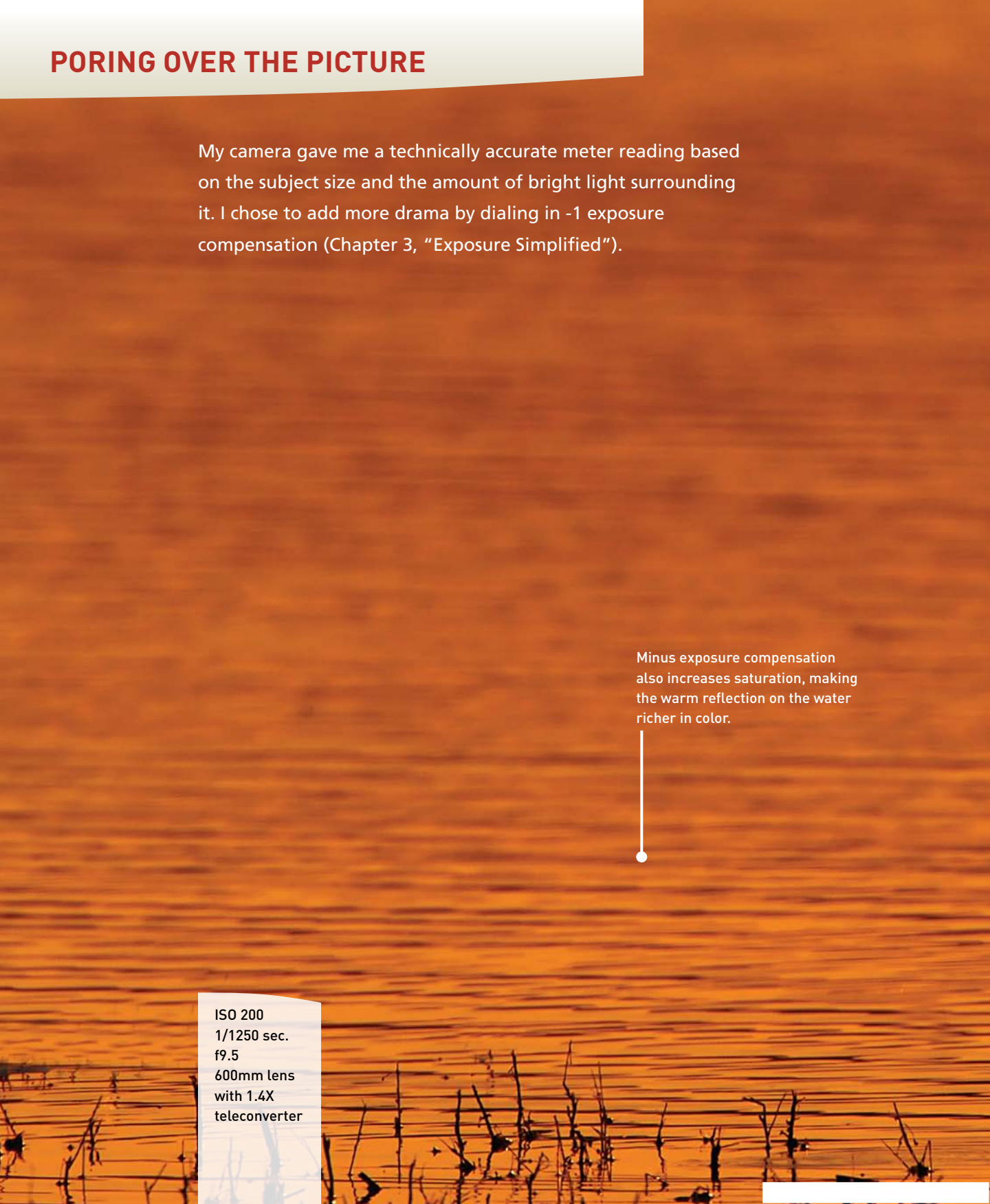
GOING BEYOND THE BASICS FOR CREATIVE CONTROL OVER YOUR IMAGES

If you take everything you have learned so far in this book, practice the techniques, add on the needed equipment and accessories, and really prepare for a photographic outing, you can expect to come back with some great shots. However, if you really want to increase your odds in the field to produce a higher keeper ratio or to come back with some unusual images, you need to take your wildlife photography to the next level. In this chapter, I'll share some of the tools I keep in my bag of tricks to pull out when conditions are less than perfect or I'm feeling particularly creative. I'll bring wildlife basics full circle with references to previous chapters as I build on what I've taught you so far, expanding on some techniques that you already know by now and breaking some of the rules to achieve a desired result. It is my goal to not only teach you the basics of wildlife photography, but to help you become comfortable in your own shooting style.

PORING OVER THE PICTURE

My camera gave me a technically accurate meter reading based on the subject size and the amount of bright light surrounding it. I chose to add more drama by dialing in -1 exposure compensation (Chapter 3, "Exposure Simplified").

Minus exposure compensation also increases saturation, making the warm reflection on the water richer in color.



ISO 200
1/1250 sec.
f9.5
600mm lens
with 1.4X
teleconverter

When a sandhill crane takes a drink of water, it tilts its head back to swallow. Anticipating this behavior led to a graceful portrait (Chapter 4, "Get to Know Your Subject").

Even though the crane's feet are hidden in the water, I left enough foreground space to include the feet, providing a more comfortable composition (Chapter 7, "Creative Composition").

PORING OVER THE PICTURE

Understanding the relationship between aperture, shutter speed, and ISO, and the compromises that must be made sometimes, led me to increase my ISO and push my comfort level with my Nikon D2H to get a shutter speed fast enough to stop the action (Chapter 3).

A DX body (D2H) with a crop factor of 1.5X turned my 200–400mm lens into a 300–600mm equivalent, nicely filling the frame (Chapter 1, "Equipment Essentials").

ISO 640
1/250 sec.
f4
200–400mm
lens

Using the Dynamic AF with 21 points selected helped to keep the bear in focus as I panned with the camera. Panning takes practice and skill to move at the same rate as your subject.

Shooting in continuous high speed allowed me to capture peak of action, with the fish literally swimming for its life as the bear chased it down the stream intently focused on a meal (Chapter 2, "Camera Settings and Shooting Techniques").

CREATIVE USE OF EXPOSURE COMPENSATION

In Chapter 3, I discussed exposure and the elements that go into making a good exposure. Now let's take it to the next level by taking control of the exposure and choosing whether to brighten or darken the exposure for effect. As I discussed in the opener, dialing in minus exposure compensation will add drama and saturation to your images. In **Figure 8.1**, a Reddish Egret is bathed in light, and the mangrove background is in shadow. Dialing in -1.5 exposure compensation darkened the background to black, making the egret stand out and enhancing its colorful feathers.

FIGURE 8.1
A Reddish Egret in breeding plumage flares its feathers.

When faced with a bird in flight against an overcast sky, my meter will dial down the exposure (trying to keep the scene a midtone value), resulting in a dark bird against a gray sky. By dialing in plus exposure compensation, I'm able to bring out the detail in the bird, and the bright sky gives the image a high key look that can be quite appealing. When a Black-legged Kittiwake flew by, I had just enough time to dial in +1 exposure compensation and turn the camera into a vertical orientation to capture a nearly frame-filling wing spread (**Figure 8.2**).

FIGURE 8.2
Adding plus exposure compensation brightens an image. Watch for blinking highlights.

FIGURE 8.3
Plus exposure compensation provides details in the cub's fur that would otherwise be in silhouette with the bright background.

On a visit to Brooks Falls in Alaska, a sow had treed her cubs so she could take a nap knowing they were safe right above her. It was such a cute shot, but the sky was bright and the cub was backlit. With the cub as my subject, I dialed in plus exposure compensation until I was able to capture detail in the cub's face and fur knowing the background would blow out (**Figure 8.3**). At +1.5 exposure compensation, I confirmed that the cub was well-exposed and the highlight warning was blinking, warning me that the background was blowing out—a compromise I made to get the shot. It's not a great shot, but it's my first image of a bear cub in a tree in my files.

WHEN TO USE MANUAL EXPOSURE

My preferred choice of exposing my images is Aperture Priority. After years of using digital cameras, I am comfortable with the way my meter works and have the skills to understand when to override my meter's choice of exposure by dialing in exposure compensation. But there are times when the exposure situation is changing so rapidly that taking the time to dial in exposure compensation may be the difference between getting a snapshot or a great shot. When I'm faced with a situation where the lighting is difficult, I turn my camera to manual exposure and set the meter to spot meter. Using my focus point as my spot meter, I'm able to expose properly for my subject and let the background fall where it may. While photographing Roseatte Spoonbills in Tampa Bay, I was faced with just such a dilemma. If I exposed for the spoonbill against the blue sky (**Figure 8.4**), I would get a good exposure of the Spoonbill until it began to drop lower for a landing. As it got lower, the background changed from blue sky to dark-green mangroves (**Figure 8.5**) or even mangroves in shadow, which were darker still (**Figure 8.6**), affecting the overall exposure, yet the light on the Spoonbill remained unchanged. Dialing in the appropriate exposure for the spoonbill, I knew that when it flared its wings just before landing, I could fire away knowing that I had nailed the exposure and the peak of action (**Figure 8.7**).

FIGURE 8.4
The pink of the spoonbill contrasts nicely with the blue sky background.

FIGURE 8.5
Manual exposure allowed me to continue photographing the spoonbill as the background exposure value changed without overexposing or underexposing my subject.

FIGURE 8.6

The spoonbill would have been totally blown out if my meter had been in control as the spoonbill dropped in front of the deep shadows of the mangroves.

FIGURE 8.7

Manual exposure allowed me to capture peak of action, confident in my exposure.

How did I know? Well, rather than fight my meter at the same time I was trying to keep the bird in the frame and the focus point on its eye, I spot-metered off the Spoonbill, set my camera to manual, and made better use of my panning skills without worrying about how the background was affecting the brightness of the bird.

How did I know to make these adjustments in this particular situation? From the school of hard knocks, where I made the mistake of overexposing and underexposing one spoonbill image after another as I focused on keeping the bird in the frame and expecting my camera to get the metering right. If I can help you prevent such a mistake, the cost of the book will be worth it.

One way to learn when to use manual exposure is to evaluate the situation when you first arrive and before the action begins. I scan the scene with my camera to my eye, and if the meter jumps all over the place as I move from sky to earth, I know that I will have an exposure problem if my subject moves from one background to the other. I then spot-meter off my subject and make an exposure. If it looks good, I set my camera to manual with the settings I got from my camera, and as my subject moves, I move with it, confident that my exposure is on the money.

NOTE

I do feel that making mistakes is all part of the growing and learning process. By making mistakes and learning from them, you gain the skills to make exposure decisions when the need arises.

NOTE

When faced with a difficult lighting situation, I simply ask myself, "What is the subject?" and expose for it.

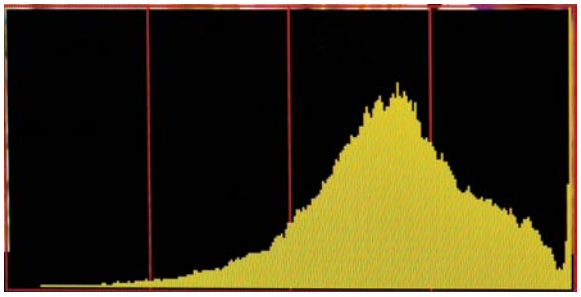


FIGURE 8.8
With the graph bunched up against the right edge, I know that there will be blown-out areas in the image of this histogram illustrating the cub in the tree in Figure 8.3.

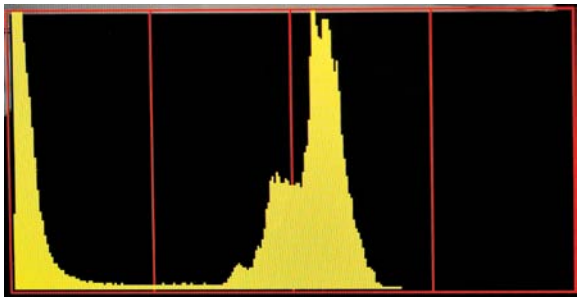


FIGURE 8.9
When the graph bunches up against the left side, the histogram indicates that there is information that is black with no detail, as in the image of the Reddish Egret in Figure 8.1.

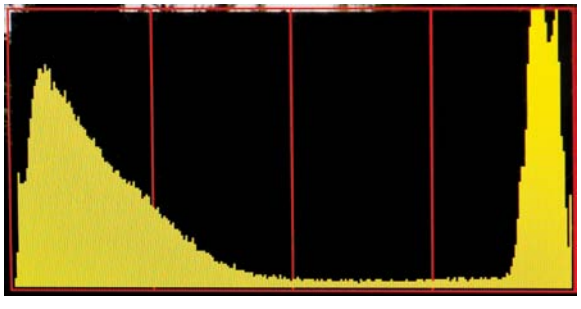


FIGURE 8.10
A histogram that bunches up against both sides of the graph indicates the exposure range is greater than the sensor can capture in one click.

UNDERSTANDING THE HISTOGRAM

The use of histograms is a controversial subject between those who use them and those who don't. It's as bad as the debate between Nikon vs. Canon, Mac vs. PC, or even RAW vs. JPEG that drives people into a rabid frenzy. I think there is value in histograms. They give you information about your exposure that aids you in making aesthetic decisions. A histogram is simply a graph of all the tonal values within an image. There is no perfect histogram, just different ones that give you a visual representation of how broad the exposure is and how much of any given tonality makes up the image. The farther to the right the graph is, the brighter the image. If the graph touches the right side, that range of tonalities is bright white without detail (**Figure 8.8**). (The blinkies actually do a quicker and better job of warning against blown-out highlights. See Chapter 2 for more information on blinkies.) If the graph touches the left side, that range of tonalities will be dark or black without detail (**Figure 8.9**). A graph that goes from edge to edge without actually touching either edge is a good exposure with no blown-out bright spots or any blocked-up blacks. And, if the graph goes from edge to edge and touches both sides, the exposure range is greater than can be captured in one click (**Figure 8.10**). Understanding the histogram enables me to make creative exposure decisions for maximum impact.

NOTE

How high the bars go (in a vertical line) in a histogram doesn't affect an image in the same way as the left-to-right orientation. The height of the bars simply indicates how much of that particular tonality is in an image.

PANNING FOR STOP ACTION OR BLUR MOTION

Having a good panning technique is essential for capturing action. Whether you want to stop action with a fast shutter speed or blur motion with a slow shutter speed, using proper handholding or long-lens techniques, as discussed in Chapter 2, will aid you in capturing the effect you desire. Although I mentioned continuous focus and advance in a previous chapter, I thought the following example would really drive home the reason for using these settings.

STOP ACTION

On a visit to Florida to photograph birds, an early morning visit to Fort DeSoto yielded a Yellow-crowned Night Heron hunting. How did I know that it was hunting? (See the discussions about knowing your subject's behavior in Chapter 4.) It was stalk-still, staring intently at something only it could see. Understanding its basic behavior, I knew that the bird was hunting and I should: a) be ready for some action, and b) be able to move in a bit closer because it was totally focused on its prey and wasn't paying any attention to me. I quickly and carefully moved in closer, lowering my tripod to its nearly ground level to be eye to eye with the night heron. I composed, focused, checked exposure, and waited. People walked by; other photographers stopped to shoot a few quick frames and then moved on; I continued to wait, eye to the viewfinder, left hand on my lens, and right hand on the shutter release. It took several minutes of waiting (not long in the world of wildlife photography) when suddenly the night heron took off running, lunging at a crab, grabbing it, and devouring it right before my eyes (**Figure 8.11**). When it was over, I let out my breath, realizing I had been holding it for a while because I was just as intent on capturing the photo as the night heron was at capturing its breakfast.

Later, when I viewed the images, I was very pleased to see the sequence from the lunge to the crumbs. All images were sharp, well composed, and told a great story. It was later when I was looking at the images again and reading the EXIF data that I realized just how fast these things can happen. I was shooting with my Nikon D3S at

FIGURE 8.11
Continuous advance and focus along with excellent reflexes and patience yielded a sequence of images of a Yellow-crowned Night Heron capturing a crab for breakfast. Having a camera with a high frames-per-second advance allowed me to make several frames in a split second, with several that would be considered peak of action. The hardest part is deciding which images I like the best. Being on the same plane as the bird and crab enabled me to keep my ISO low and open the aperture to 5.6, yielding a shutter speed of 1/2000, which stopped the action dead in its tracks.

9 frames per second. I held down on the shutter through the entire event. In all, I captured 11 images. So, without even pulling out a calculator, it was plain to see that having the right equipment (Chapter 1) and skills for the job, and exercising patience yielded yet another "lucky" shot.

BLUR MOTION

Although a fast shutter speed stops the action, creating a powerful image as you share a split second of time with your viewers, a slow shutter speed provides an image with a feeling of motion and a dreamy, soft look. Creating beautiful blurs is definitely a challenge. You don't just go out flinging your lens in any direction willy-nilly with a slow shutter speed and hope to come back with any worthwhile shots. It takes lots of practice to get the panning speed just right and move with the rhythm of your subject. My keeper ratio plummets when I work on blur pans, but the few successes I manage to capture each time make it all worth the effort.

NOTE

You have to be trying new things, stretching your photographic wings to continue to grow. In the process, there will be failure; learn from your failures, and then go back out and give it another try. The success is all the sweeter from the effort.

Still using Aperture Priority and my other normal wildlife settings (Chapter 2), I dial down the aperture to a smaller opening (f16–f22) in low light or work in low light without raising the ISO, which results in a slower shutter speed. I then pan with a bird in flight, and if I'm panning at precisely the same speed, I capture the head and eye in focus with the wings pleasantly blurred, giving a sense of motion that is not present in the stop-action image (**Figure 8.12**).

FIGURE 8.12
Shooting at a slow shutter speed and panning with a bird in flight creates a pleasing blur to the wings while keeping the eye in focus.

Another method for creating pleasing blurs is to lock down the tripod and shoot a still subject with movement around it, as in the grizzly bear image taken at Brooks Falls (**Figure 8.13**). It took several frames to get the bear sharp as he was scanning the water in search of fish, but he did pause at the end of each scan, giving me a few seconds to make a shot. With this method, the bear remains sharp and the water blurs nicely around it, giving a sense of motion around the bear.

FIGURE 8.13
Shooting at a slow shutter speed with the camera mounted on a tripod allows the water to blur and everything stationary to remain sharp.

Although I do end up discarding lots of images when I'm working with blur pans, I also find some images that, even though they don't fit the normal criteria of having a sharp eye, make pleasing, abstract blurs. One such image was made while panning with a small group of sandhill cranes at Bosque del Apache National Wildlife Refuge in New Mexico while I was working on my blur pans. There are no sharp eyes, but you can still tell what they are, and the end result is whimsical, fun, and creative (**Figure 8.14**).

FIGURE 8.14
The late evening light and the soft blur of the sandhill cranes make a beautiful abstract blur.

It can be difficult finding your subject in the viewfinder with a telephoto lens. I begin by attaching my lens shade with the tightening screw facing up in line with the viewfinder (**Figure 8.15**). This gives me a sight to use to find the bird before bringing the camera to my eye. Next, I adjust my focus to infinity so that the subject is more visible (not a blur that is hard to distinguish from the background). Then I follow the sightline as I bring the camera to my eye, and when I look through the viewfinder, my subject is there. It's then a simple matter to find focus and adjust the composition so that I am ready for action.

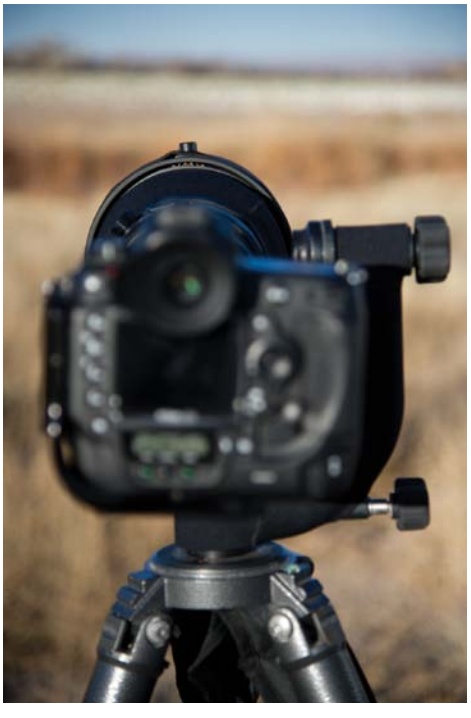


FIGURE 8.15
Aligning the viewfinder to the tightening screw on the lens shade provides a sight (or target) to help you place the subject in the viewfinder quickly and easily.

How do you hone your blur panning skills so that when you are faced with a situation that would make pleasing blurs, you are on top of your game? Practice, practice, practice is the answer, and you can find many situations in which you can practice your panning near home. Go to the local park (Chapter 5) to photograph birds in flight, dogs running, and so on. One particularly windy day in Florida I realized that we were not going to get any bird activity because the wind was too fierce and the birds had all hunkered down to wait out the wind. (Wildlife does not particularly like wind; their senses become dulled in the wind. They can't hear or smell where danger is coming from.) I was about to give up and suggest that we head back to the hotel to do some postprocessing and image editing when I saw kite surfers all over Tampa Bay. I pulled over, turned off the car, and told the group, "We're going to work on panning this afternoon." They all looked at me like I was crazy but got out and set up anyway. We spent an enjoyable afternoon working on our panning skills, and the group got quite good by the end of the session (**Figure 8.16**). When everyone was feeling pretty good about panning, I had each photographer dial down the aperture to slow down the shutter speed and work on blur pans (**Figure 8.17**).

FIGURE 8.16
A fast shutter speed stops the action and the spray of water, and the kite surfer's expression is frozen in time.

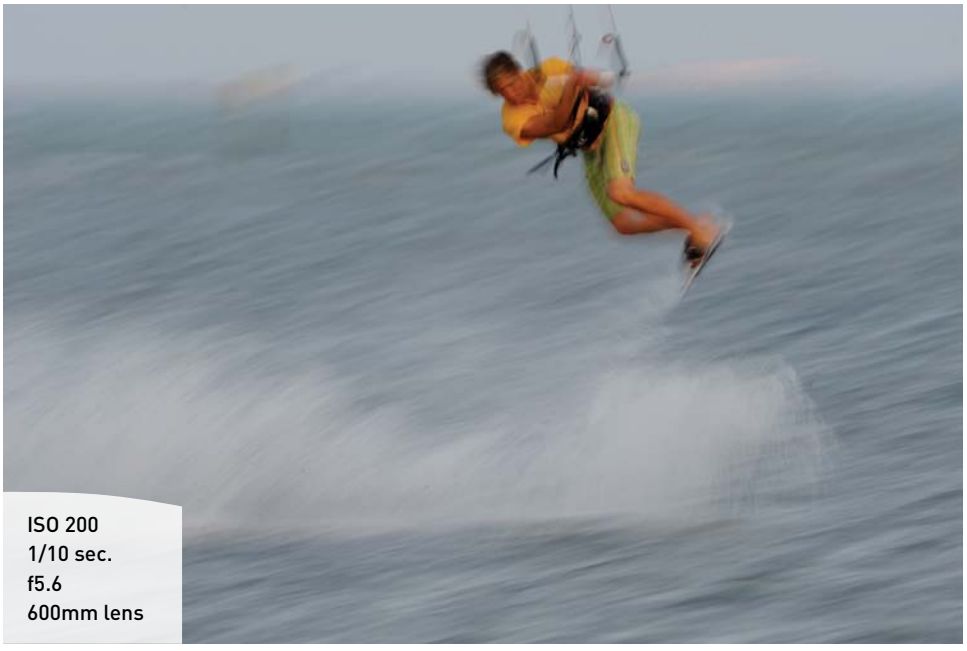


FIGURE 8.17
A slow shutter speed adds to the feeling of motion. It has a soft, dreamy quality to it.

EXTENSION TUBES ARE NOT JUST FOR MACRO

FIGURE 8.18
Extension tubes allow you to focus closer than your lens's normal minimum focus distance.

I'll end this chapter by explaining one last technique for your wildlife photography arsenal. You have the equipment to get tight shots and you have the technique to move in close, yet with all of that you still can't get as close as you'd like. Enter extension tubes (**Figure 8.18**). Most people associate extension tubes with macro photography because they allow you to move in closer to a subject. They also offer the same ability when attached to a telephoto lens. When we came upon a Blue Grouse in Grand Tetons National Park, I slowly approached the bird, dropped low to be at eye level, and composed. I wanted the bird to be larger in the frame, so I crawled on my knees to get a bit closer. It still wasn't close enough, but I was at minimum focus distance on my lens. I reached in my pocket, attached an extension tube between the body and the lens, and crawled another couple of feet closer to get the shot in **Figure 8.19**.

FIGURE 8.19
A tolerant Blue Grouse allowed me to move within frame-filling distance to make a shot.

Chapter Assignments

Take time to work through the assignments to perfect your skills at understanding exposure and panning with moving subjects before moving on to the final two chapters.

Exposure Compensation

Using your Highlight warning and Histogram settings on your camera (refer to your instruction manual), make a series of images using exposure compensation. Begin with a base exposure of zero compensation, and then dial in one-half increments; take a series of shots at minus exposure compensation and a series at plus exposure compensation. Notice whether or not you get the blinkies with the overexposed images, and watch your histogram to see where the exposure range falls in each situation. Also, review the images to see which exposure works best for the particular situation. Do this in several different lighting conditions to get a better understanding of exposure and how exposure compensation affects the mood of your image.

Stop-Action Panning

Go to the beach, a racetrack, or a local park—a location where there is some form of action. Work on your panning skills using a variety of fast shutter speeds (to change from one shutter speed to another using Aperture Priority, simply change the aperture and the shutter speed will adjust accordingly). Evaluate your images to see how slow a shutter speed you can comfortably pan with and still capture the stop-action feel. Notice the effect of the different fast speeds on the stop-action effect.

Blur-Motion Panning

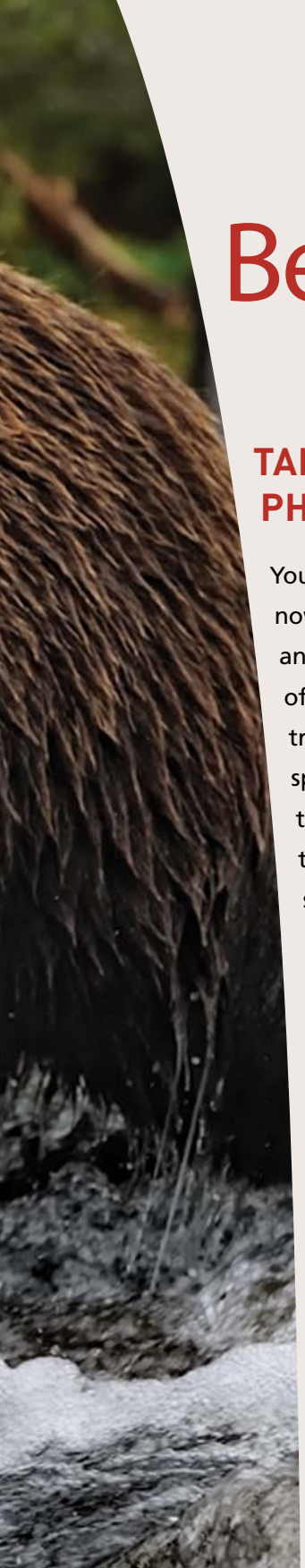
You can do this assignment and the previous one at the same location. This time dial down your aperture to a small opening to reduce your shutter speed. If you can't get a slow-enough shutter speed, consider adding a neutral density filter to achieve an even slower shutter speed in bright light. Work at panning with your subject at various slow speeds to see the different effects. Find your comfort zone of slow speeds so you know where to start when faced with the opportunity to do blur pans.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

9

ISO 200
1/250 sec.
f5.6
70–300mm VR
lens



Bear Tales

TAKE A WALK ON THE WILD SIDE: PHOTOGRAPHING COASTAL BROWN BEARS

You've learned a lot of information in the previous eight chapters. So, by now you should have a pretty good idea of what you need in equipment and skills to make great wildlife images. In this chapter, I'll share some of the realities of wildlife photography as I describe the trials and tribulations, and the highs and lows of photographing mammals—more specifically, capturing shots of coastal brown bears in Alaska. I'll take you through my thought process in gear selection, packing, and dealing with today's travel restrictions. I'll cover the nuts and bolts of actual location shooting, as well as the logistics of travel, both getting to the location and getting to my subjects once I'm on location. I'll discuss weather, light, tides, and the other factors that influence the success of a shoot; the long periods of inaction followed by intense periods of heavy shooting; the thrill of success, the agony of defeat, and the lessons learned. So, get ready for an exciting week of capturing great shots of Alaskan coastal brown bears.

PORING OVER THE PICTURE

The location and the mode of transportation dictated which lens to bring. The 70–300mm was perfect for this situation, because it was easy to transport and was just the right focal length for the proximity of the bears.

The foul weather that kept us in the lodge for two days also brought up the level of the lake enough to feed the river, rewarding us with a rare opportunity to photograph the bears at this intimate setting.

During the fall Silver Salmon run, high water brings the fish to the rivers to spawn, the bears to catch the fish, and the photographers to capture the event.
Two adolescent siblings work the river fishing for salmon.

ISO 400
1/180 sec.
f5.6
70–300mm lens

WHAT, WHERE, WHEN, AND HOW

Planning any adventure begins with deciding what you want to photograph, what equipment and clothing you'll need to bring to accomplish your goals, where the best locations are for finding your subject, and when the best seasons are to photograph your subject (Chapter 5, "Location, Location, Location"). Preparation also includes the logistics of actually getting you and all your gear on location.

I begin planning an adventure well over a year in advance to ensure that I can book the location I want and get flights for a reasonable amount of money. Plus, long-range planning gives me plenty of time to determine what gear I need to add and the time to acquire it. Let's take a look at the what, where, when, and how of a wildlife photography adventure.

ISO 400
1/250 sec.
f5.6
70–200mm lens

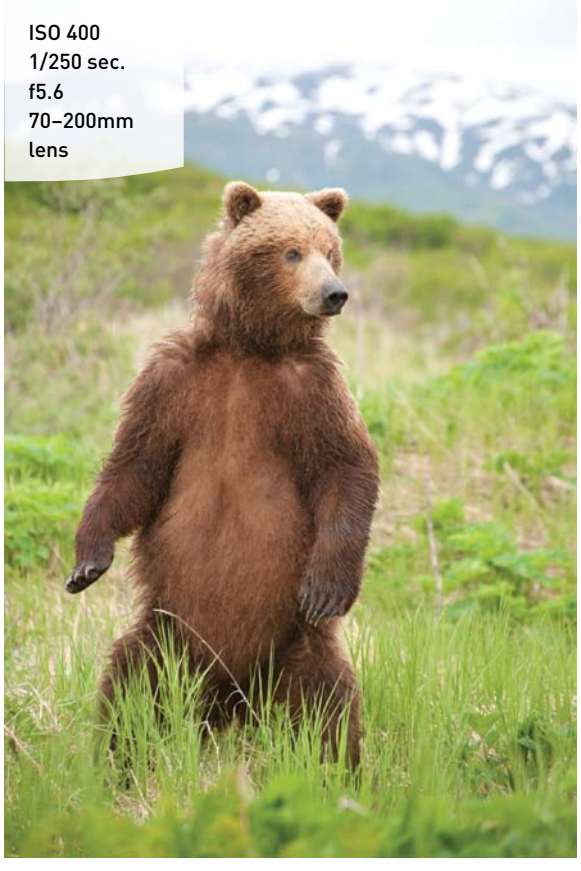


FIGURE 9.1
A brown bear stands up for a better look, signaling the possibility of another bear in the vicinity.

WHAT SUBJECT

I first determine what it is I want to photograph. As mentioned earlier, in this case I'll share with you an adventure to photograph my favorite subject, the Alaskan coastal brown bear (**Figure 9.1**). My love affair with the bears began over a decade ago when I made my first visit to Alaska with Moose Peterson (who became my mentor and friend, and the driving force behind my wildlife photography career in the early days). All it took was spending a week with the magnificent creatures and I was hooked. One of the requirements for attending Moose's bear safari was that each participant research and write a paper on the coastal brown bear and send it to him before the safari began. That first bit of information enticed me to want to learn more about my new favorite subject. I bought books, studied others' images on the Internet, watched videos and wildlife shows, and tried to soak up as much information as I could about the bears so I would be prepared for my first encounter with them (Chapter 4, "Get to Know Your Subject").

WHAT EQUIPMENT

Knowing what my subject is gives me the information I need to think about what equipment (Chapter 1, "Equipment Essentials") I'll need for the upcoming adventure. I always want to try to travel as light as possible without compromising my options. Here's what's in my bags for this adventure:

- Nikon AF-S 500mm f4 VR instead of my normal 600mm because it provides good magnification and is relatively lightweight. Also, it will give me a slightly different perspective on a familiar subject.
- Nikon AF-S 70–300mm 4.5-5.6 VR (in lieu of my normal 70–200mm 2.8 VR) ultra-lightweight and tack sharp is great for handheld shots. I compromised with the slower aperture to reduce weight.
- Nikon AF-S 24–70mm 2.8.
- Nikon AF-S 14–24mm 2.8 for environmental portraits and landscapes. Both lenses are fast and work great for night photography (weather and planetary alignment permitting).
- AF 16mm 2.8 Fisheye for whimsical and fun compositions.
- Two D3S Bodies. The performance of my D3S at 9 frames per second allows me to stop action; the low noise allows me to shoot in low light or make long exposures; and the rugged construction gives me peace of mind that my camera can take the adverse conditions that I often find myself in.
- Two batteries per camera.
- Two 32-GB and ten 16-GB Compact Flash cards. Memory is cheap; I never want to run out of card space on a shoot of a lifetime.
- Gitzo GT3541LS with Wimberley gimbal head. The lighter 500mm allows me to carry a lighter tripod, reducing the amount of weight for travel.

NOTE

Don't forget quick-release plates for all bodies, lens mounts, and so on.

- Nikon 1.4X, 1.7X, and 2X teleconverters. I can use the 1.4X with full speed and functionality on my 500mm and the 1.7X and 2X with reduced focus speed but with a gain of increased magnification for detail work; it's worth the compromise.
- Small point-and-shoot camera that shoots in RAW and offers video.

- Wimberley Flash Bracket with small ballhead to attach the point-and-shoot to the camera setup.
- Really Right Stuff BH-55 ballhead with QR adapter to mount it to Wimberley to avoid removing the Wimberley head.
- Nikon MC-36 Remote Release for star trails and other night photography.
- Protective UV filters on each lens that has a filter thread to protect the optics from the elements.
- Polarizing filter to remove reflections and enhance overall color.
- Neutral density filter to slow down the shutter speed in bright light to capture the blur-motion effect.
- Shutter Hat and ThinkTank rain gear to protect my equipment from the most severe weather.
- Moose MP-1 Photopack.
- Moose MP-7 Photopack stuffed with assorted gear and accessories in my checked bag to get to the location. I then use this as my day bag in the field.
- Power strip to use as a charging station in my cabin to keep my equipment fully powered.
- Cleaning and tools kits.
- Two hand towels for in the field.
- Binoculars.
- MacBook Pro 15" laptop computer with Lightroom, Photoshop CS5, OnOne, and NIK plugins installed for editing and postprocessing of images each day.
- Two Buffalo 1-terabyte external hard drives—one for my images and the other for backup. (You do back up your images, don't you?)
- Wacom Intuos IV tablet. I can't live without my tablet for postprocessing my images.
- Lexar USB 3 card reader.

WHAT CLOTHING AND OUTDOOR GEAR

My comfort is essential for keeping my mind on the subject at hand. Part of my research includes learning about the local climate so I can dress appropriately. Alaska has different requirements than many of my other wildlife adventures. The No. 1, must-have, essential piece of clothing is an excellent pair of waders and boots with good traction. I live in my waders, wearing them from the time I prepare to leave the

lodge for the day to the time I return. Because my photography group and I travel to and from our locations by boat, and depending on the tides, we are often walking in water. The areas we work are tidal flats that are submerged at high tide and exposed but wet and mucky during low tide. So, having the right gear to keep me warm and dry helps me to focus all my attention on my subject.

Figure 9.2 shows me geared up for a day in the field. My telephoto is mounted to my tripod, a second body with lens is draped over my shoulder, and my waders and waterproof jacket finish out the ensemble.

Here's what else is in my clothing bag:

- Lightweight thermal underwear to wear under my waders to ward off a chill on cool days.
- Comfortable pants to wear around the lodge.
- Long-sleeved T-shirts and fleece tops because the temps can vary from balmy to downright chilly.
- Lightweight gloves (which I've only worn a handful of times but was glad to have them when I needed them, and they don't take up much space).
- Windblock fleece jacket. Even on nice days it can get a bit nippy on the water.

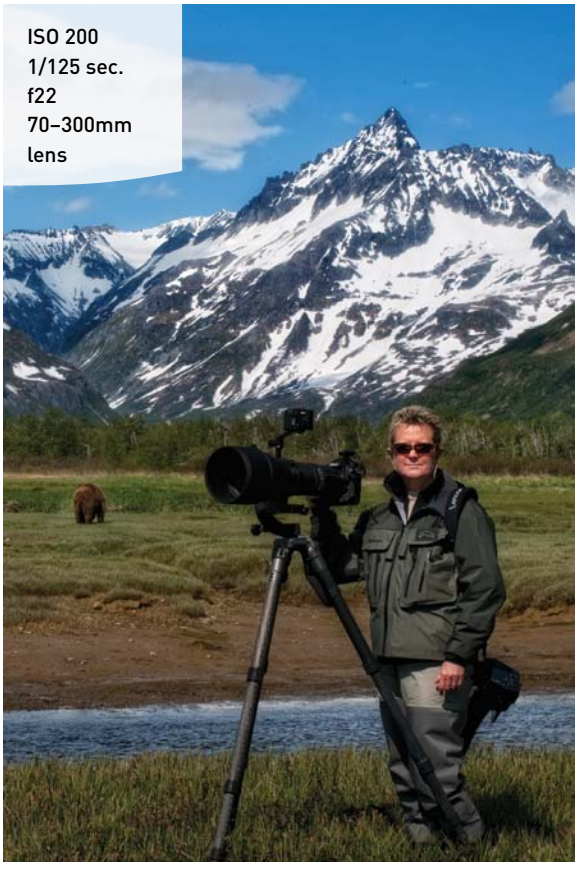


FIGURE 9.2
Proper clothing is critical to be successful at wildlife photography. Waders are a must-have item.

- Sunglasses, hat, sunblock, and bug spray are a must and are close at hand at all times.
- Gortex rain jacket, just in case. Odds are I'll need it at some point during the week.
- Thick and thin socks to layer in my waders.
- Slippers for the lodge because it has a no-shoes policy.
- Comfortable loungewear for evenings in my room-preparing for the next day.

NOTE

Everything must fit in two checked bags or less and cannot weigh more than 50 pounds each!

WHERE

After learning from previous visits that it is a wonderful place to photograph wildlife, I decide Alaska will be my destination of choice. I then narrow it down further to a specific geographic area and lodge based on one of the best locations that I've found to observe bears. Since my first visit in 2003, I've been returning yearly to a remote lodge in Katmai National Park, Alaska (**Figure 9.3**). When searching for a place to go, I look for a location that provides a quality wilderness experience with abundant photographic opportunities. It is best if the place is remote with few visitors so that I can enjoy my wildlife adventure without jostling for position with a crowd, and the wildlife is not bothered by my presence, so I can approach within photographable distance. However, I do like the comforts of electricity to power my computer and charge my batteries; running water for a hot shower after a day in the field; a good meal under my belt to sustain me through the day of trekking after my subject; and a cozy, warm bed to climb into at night (**Figure 9.4**). The lodge and its staff provide all that and so much more, which is why I return year after year.

FIGURE 9.3
A remote lodge in Alaska is accessible only by boat or seaplane.

ISO 200
1/350 sec.
f5.6
24–120mm lens

FIGURE 9.4
My cabin provides all the comforts of home while maintaining a rustic, wilderness feel.

WHEN

The season for photographing brown bears in Alaska is relatively short. It starts when the bears appear in early to mid-May. The boars and single females emerge first, and the sows with cubs arrive a bit later (**Figure 9.5**). Spring is a time of rebirth, and an Alaskan spring is like rebirth on steroids: The grass pushes up; flowers emerge, bud, and bloom all in a matter of a few days; bears begin to clam and graze on the sedge grasses; active boars often display a bit of sparring; eagles nest with their young chicks; harbor seals have their young; Black-legged Kittiwake build nests and choose their mates; Puffins return to offshore rocky islands to find a burrow to make their home while they raise their young. It's a very lively and energetic season.

The summer pace slows down a bit as the bears sate their first hunger and settle in to fatten up on more grass and the first fish run of the season. There are several "runs" a season beginning with the pink and chum, followed by the red, and finally the silver as fall approaches (**Figure 9.6**).

FIGURE 9.5
A sow with cubs seek higher ground for safety from boars. This photo opportunity yielded one of my favorite photos to date.

FIGURE 9.6
A bear pauses for a brief moment with its prized catch before taking it to shore to eat.

Fall comes early to Alaska with the beginnings of a chill to the air in late August. The cold increases in earnest as September wears on. It is a wonderful time to visit Alaska to photograph the bears. The tundra turns to warm reds and oranges, the fireweed blooms to the top of the stem, and the bears become fat and healthy from the summer's bounty (**Figure 9.7**). The final salmon run winds down, providing the opportunity for some good fishing photos still to be made. You can feel the bears' urgency as they look for those last calories to sustain them through the winter months of hibernation. Fall is the season I've chosen to share with you here.

HOW

With the decision made to photograph bears, in Alaska, in the fall, the challenge becomes figuring out the tricky logistics of getting there with all my equipment intact. I weigh my options to find the best means of transportation to get me to my destination via the shortest and easiest route.

FIGURE 9.7
Bears are at their prime in the fall.

The first leg of my journey begins with a direct flight from Portland, Oregon, to Anchorage, Alaska. This flight is an easy one because the planes are big enough to accommodate my camera gear and computer as carry-ons and two checked bags with all my other gear. From Anchorage to Kodiak, the journey gets a bit trickier because the size and weight limits for some flights are smaller, lighter, and stricter. I really look closely at the type of plane and the times available to me. If I can book a larger plane, I will, just for the peace of mind of knowing that I'll be able to carry my camera onto the plane without having to check it.

Arriving in Kodiak, I'll have traveled a total of 8 hours and 1,800 air miles. In Kodiak, I meet up with my group of eager photographers, and we do some last-minute shopping to stock up on supplies and snacks for the week at the lodge. The final leg of the trip to the lodge, via floatplane (**Figure 9.8**), will depart the following morning. I go to bed dreaming of good weather so the flights can make it.

FIGURE 9.8
Floatplanes are a common and necessary means of transportation in Alaska, and the only way to get to the lodge other than a very long and potentially rough boat ride.

ISO 200
1/350 sec.
f11
70–200mm
lens

ISO 200
1/350 sec.
f8
24–70mm lens

FIGURE 9.9
An intrepid group of wildlife photographers ready for an excellent adventure.

DAY 1

The morning in Kodiak dawns bright and sunny, and I awake early, eager to get going but knowing that we won't leave for several hours yet. With this preflight time in mind, I usually prearrange to meet up with those of the group who want to head over to the Kodiak marina for an early morning shoot to limber up our shutter fingers and get the creative juices flowing. The early morning shoot at the marina before heading to the lodge helps people change gears from the responsibilities and pressures of everyday life to shooting bear mode. No matter how many times I travel to Alaska to photograph the brown bears, I still feel as excited as my first time. No two visits are ever the same, and the photo opportunities equally vary.

After a couple of hours wandering the docks, the sun is high and hard, so we call it a morning and head to breakfast and back to the hotel to prepare for the flight to the lodge. I pack up everything except a body with the 24–70mm attached for aerial shots on the flight over. At the floatplane docks, we weigh in for distribution of weight in the planes, and after pausing for a quick group portrait (**Figure 9.9**), we board our planes and head off to our home for the next week. It takes three floatplanes to get all seven of us, our gear, and extra supplies to the lodge.

ISO 200
1/500 sec.
f8
500mm
lens with 2X
teleconverter

FIGURE 9.10
A bear passes close by as it wanders the river looking for fish.

A short time into the flight, our destination comes into view, and we land smoothly on the water. The staff is at the beach ready to welcome us and help carry our gear to our cabins. After a delicious and fortifying lunch, we "gear up" (put on waders and boots, and grab other essential gear to head out into the field) and head down the beach to the waiting boat, anxious to get out and spot our first bear. In no time we arrive at the river, set up our gear, and start photographing fishing bears (**Figure 9.10**).

We spend the next several hours working the bears as they work the river. At times they pass close enough to get head shots, and other times we are able to capture environmental portraits with the dramatic Alaskan landscape as the backdrop. I use every lens that I have with me (24–70mm, 70–300mm, 500mm, and teleconverters). It's a great start to what is going to be an awesome week. Satisfied with our first bear encounters, we pack up and head back to the lodge where a gourmet meal of fresh seafood and other delights await us (**Figure 9.11**).

FIGURE 9.11
Despite the remote location, the meals are world class.

DAY 2

Our second day is much like the first. After a delicious and hearty breakfast, we head to the river where we spend another great day photographing the bears as they fish (**Figure 9.12**) and sleep (**Figure 9.13**). Sometimes we simply stop to enjoy the moment as they pass close by (**Figure 9.14**). There are times of inactivity where we simply enjoy the beauty around us and wait for our next bear. Other times, there are so many bears that we don't know where to aim our lenses. By keeping our movements and noise to a minimum, the bears go about their business aware of us yet unconcerned about our presence. As the afternoon wears on, the clouds build, softening the light, which extends our quality shooting time but can often indicate threatening weather for the next day's shoot.

FIGURE 9.12
By timing my shutter clicks to the cadence of the bear's pace, I was able to capture its paw out of the water showing off its long, sharp claws.

FIGURE 9.13
After all the energy it takes to fish, a bear pauses to nap for a bit, enabling me to move in for a close-up.

FIGURE 9.14
Sometimes you have to just stop and enjoy the moment.

DAYS 3 AND 4

The ominous clouds of the previous day end up hanging around and giving us 48 hours of weather. By "weather," I mean torrential downpours and gusting winds. The kind of weather that keeps even the heartiest of all wildlife photographers indoors. Any attempt to venture out will result in a hellish boat ride in the rough seas and difficulty keeping us and our gear even remotely dry. And frankly, with such bad weather, even the most self-respecting bears will hunker down in a protected place to wait out the storm too. So, what do you do with a boat and some fishing rods at hand? You go halibut fishing. It's a great way to while away a snotty afternoon, rocking and rolling in the swells while trying to reel in a good-sized halibut. With a good catch (**Figure 9.15**), we call it a morning and head back to the lodge to get warm and dry by the fire.

FIGURE 9.15
A sampling of the bounty that awaits the dedicated fisherman (from a previous trip).

We also take advantage of the weather by spending time reviewing our images to see how we can improve when we go back out and selecting some to work on (**Figure 9.16**). A weather day is not a total loss when you have the comfort of a roof over your head and a cozy lodge (**Figure 9.17**) to snuggle up in and watch the storm rage on outside. And did I mention the gourmet food? There is always plenty of that to go around while relaxing and enjoying each other's company.

FIGURE 9.16
A weather day provides an opportunity to review images.

FIGURE 9.17
A five-stop bracket and HDR processing was needed to capture detail inside and out.

After two straight days of rain, we start to get a bit of cabin fever. It's no surprise that everyone is anxious to get back out in the field. But sometimes luck is with you and the payoff from all the rain is huge. The night of the second rain day Perry, our guide, pulls me aside and presents his idea for the next day. Two days of rain will add enough water to a nearby lake that the river flowing out of it will more than likely be flowing well enough for the salmon to run. So, the new plan is to bring the group upriver to photograph the fishing bears in a different location—which only happens when all the conditions are right. But first, we need to figure out the logistics. This one spot is only accessible via a long hike while beating the bushes (a scary prospect in bear country) or kayaking across the lower lake to get to the river with the gear (which is another scary prospect of carrying expensive gear in a small boat across a body of water). But by being careful and leaving our biggest lenses at the lodge, we can safely do it and have the opportunity to get some wonderful images. However, because the new location isn't big enough for all of us at one time, separating the group is the only option. While one group works the river, the other group will go out sightseeing for other photo opportunities. With the plan in place, I break the good news to the group. Needless to say, everyone is psyched to get back into the field again.

DAYS 5 AND 6

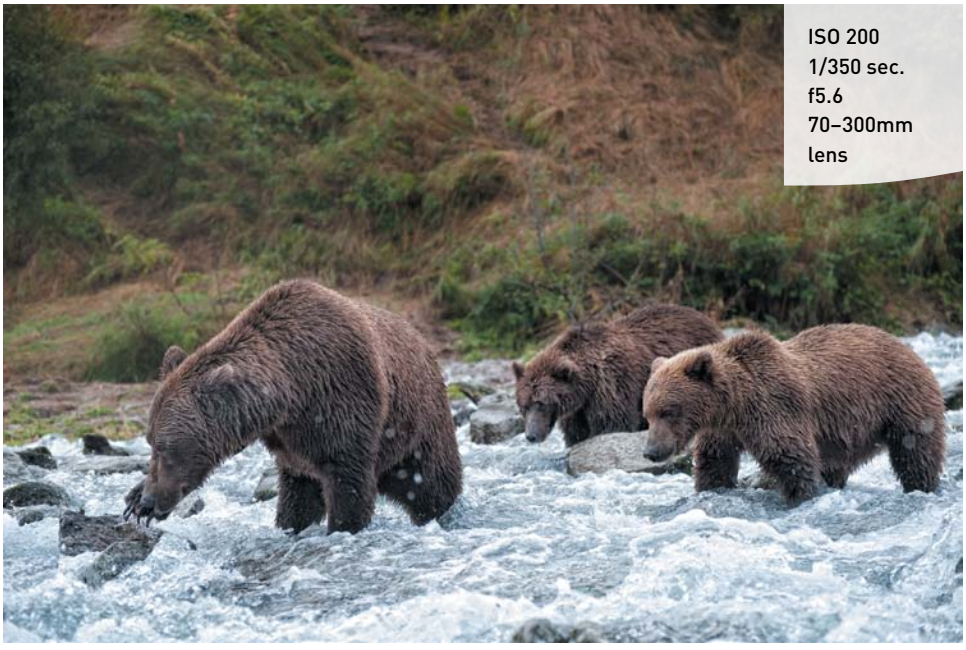
The next day, just as predicted, brings rain showers, but our plan is definitely still on. After breakfast, we suit up and head over to the lake to see if Perry's prediction was correct. I had complete faith, because Perry has been living and working in Katmai National Park for nearly three decades and has seldom been wrong in his weather and animal behavior predictions.

Sure enough, at the lower lake we can see the water rushing from across the lake. We walk back to the boat to get our kayaks and portage them to the lake. The crossing goes smoothly, and there are bears at the river on our arrival. A sow with her 1-year-old cubs are working the river (**Figure 9.18**). Mom is catching fish while the cubs are vying for the scraps (**Figure 9.19**) they can steal. We enjoy a couple of hours watching and photographing the family.

NOTE

Not only have I come to rely on the staff at the lodge for getting me and my groups to within photographable distance safely, but I have come to trust their intuition and enjoy their friendship. Having top guides enables me to deliver the goods to my groups, and these guys go the extra mile to make our visits as fun and productive as possible.

FIGURE 9.18
A sow fishes with her cubs close at hand while they steal morsels and learn how to fish from mom.



ISO 200
1/350 sec.
f5.6
70–300mm
lens

FIGURE 9.19
One cub devours fish eggs it stole from its mom, while the other digs under a rock searching for scraps.

ISO 400
1/250 sec.
f5.6
70–300mm
lens

The sow becomes nervous at one point and heads off into the brush with her cubs, indicating that there is likely another bear in the area. A short time later, a big old boar appears and proceeds to sit at the river's edge watching for fish (**Figure 9.20**). He soon grows tired and lies down to take a nap. Shortly thereafter, he awakes, watches the water for a few minutes, and then disappears back into the brush. Before long, the two cubs reappear without mom. She is certainly close by but not in view. We enjoy another several minutes with the cubs working the river as they try their paws at fishing (**Figure 9.21**). They keep an eye on us, but it is more out of curiosity than fear.

We are confined to a small patch of real estate with the bears all around. They are in the river, the lake, and occasionally peak through the bushes at us before disappearing upriver again (**Figure 9.22**). Being near bears means being aware at all times. A bear can pop up anywhere, anytime, and they do!

FIGURE 9.20
A big boar arrives at the river.

A week in Alaska photographing coastal brown bears goes all too quickly. It's not long before we find we're repacking all our gear, saying our fond farewells to the bears and the great staff at the lodge, and boarding our floatplanes to head back to Kodiak and civilization. With a quick stop at the fish factory to process and ship our halibut, before we know it we are back in the Kodiak airport awaiting our flight to Anchorage and then on home. After 2,000 plus air miles and 12 hours of travel, I touch down in Portland and wait until the next great adventure calls.

There truly are no words to explain the feeling of being out in nature with these giant creatures and having them know you are there, accept your presence, and go on about their daily lives while presenting you with the greatest gift of photographing them as they are.

I hope this little glimpse of a real-world photo adventure has piqued your interest in wildlife photography even more and that you will make the what, where, when, and how of your wildlife photo adventure of a lifetime come true.

FIGURE 9.21
A pair of 1-year-old cubs pause in their fishing to check us out.

ISO 400
1/250 sec.
f5.6
70–300mm
lens

FIGURE 9.22
Photographers line the river bank photographing a pair of fishing bears.

ISO 400
1/500 sec.
f8
70–300mm
lens

Chapter Assignments

Take time to work through the assignments before moving on to the last chapter in which I take you on another adventure to photograph the birds of South Texas.

Get to Know Your Lenses' MFD

What is your lenses' MFD? MFD is minimum focus distance. Set each of your lenses to its minimum focus distance and find subjects to photograph at your lens's MFD. Try this with each lens you have to get a feel for just how close you can get and how much an object fills the frame at MFD.

Try All the Angles

Once you find a subject, photograph it from three to five different angles. Move left, move right; raise up, get down. Whatever angle you choose, compare the images after the fact to see if your first angle was your favorite or if working the scene gave you a better composition.

Three Ps

Practice, persistence, and patience are the criteria for success. Get out and practice your photography every chance you get. Keep persisting until you take your snapshots to great shots, but have patience; that sleeping bear will rise at some point, and when it does, you'd better be ready to rock and roll.

You will be amazed at how lucky you become when you put in the time with a subject. It's then that you are able to capture those special moments of behavior that make amazing photographs.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

10

ISO 100
1/60 sec.
f8
600mm lens

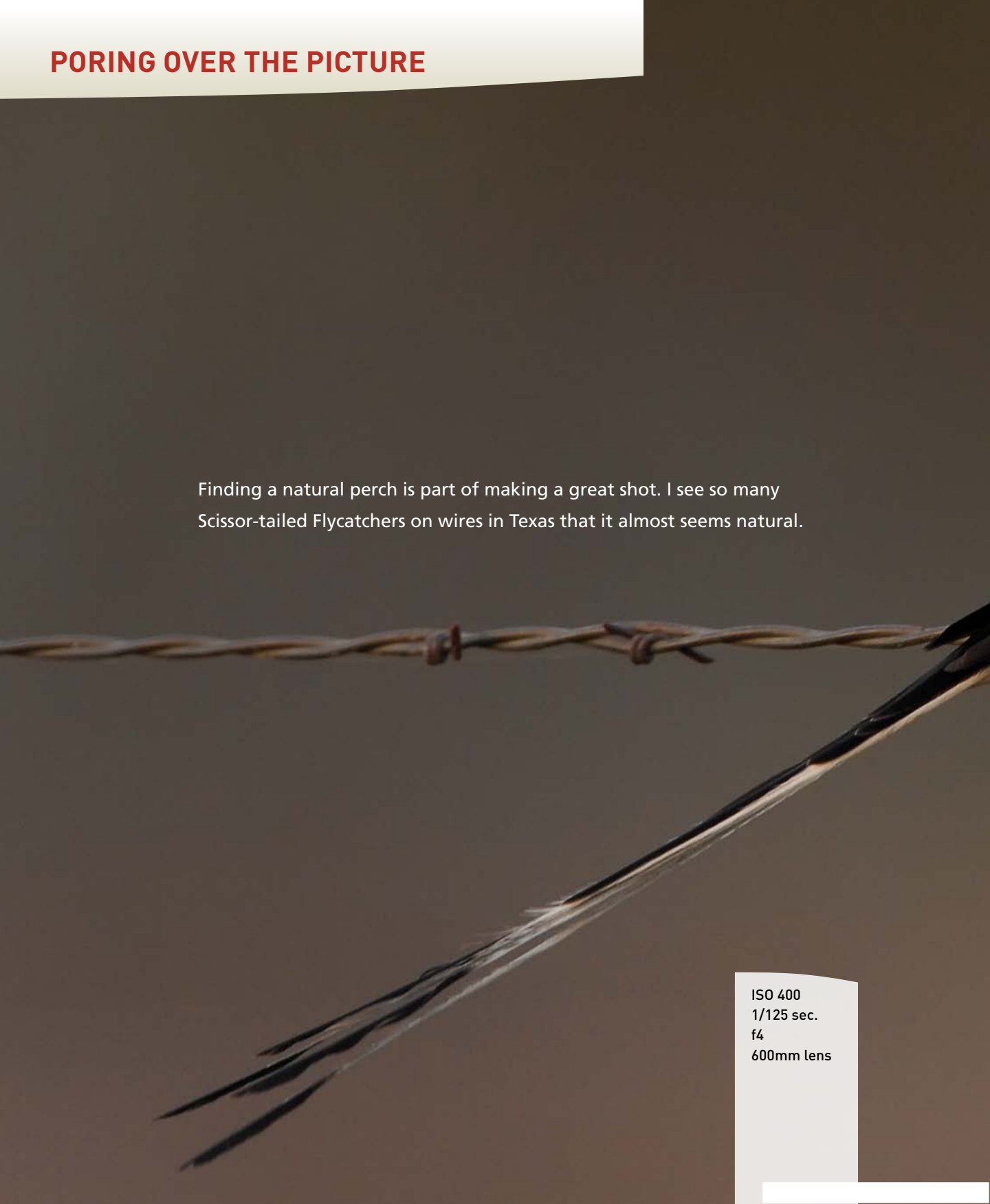
Birds of a Feather

A VISIT TO ONE OF MY FAVORITE BIRD PHOTOGRAPHY HOT SPOTS

For every type of bird, there is a best location and a best season. Putting it all together is what ensures a successful photographic adventure. Although I love to scout and find new locations, I have a few favorites that I can't seem to miss each year. In this chapter, I'll share one of my favorite bird photography hot spots with you. This adventure takes place in the deep south near the Mexican border in McAllen, Texas, where many ranchers are opening up their property to photographers so that you can visit and photograph the local residents and the migrants that pass through at certain times of the year. When I say the photography in South Texas is hot, I don't mean just the outstanding variety of birds (we counted 47 species one week); it's HOT! So, pack your shorts and T-shirts, and let's go.

PORING OVER THE PICTURE

Finding a natural perch is part of making a great shot. I see so many Scissor-tailed Flycatchers on wires in Texas that it almost seems natural.



ISO 400
1/125 sec.
f4
600mm lens

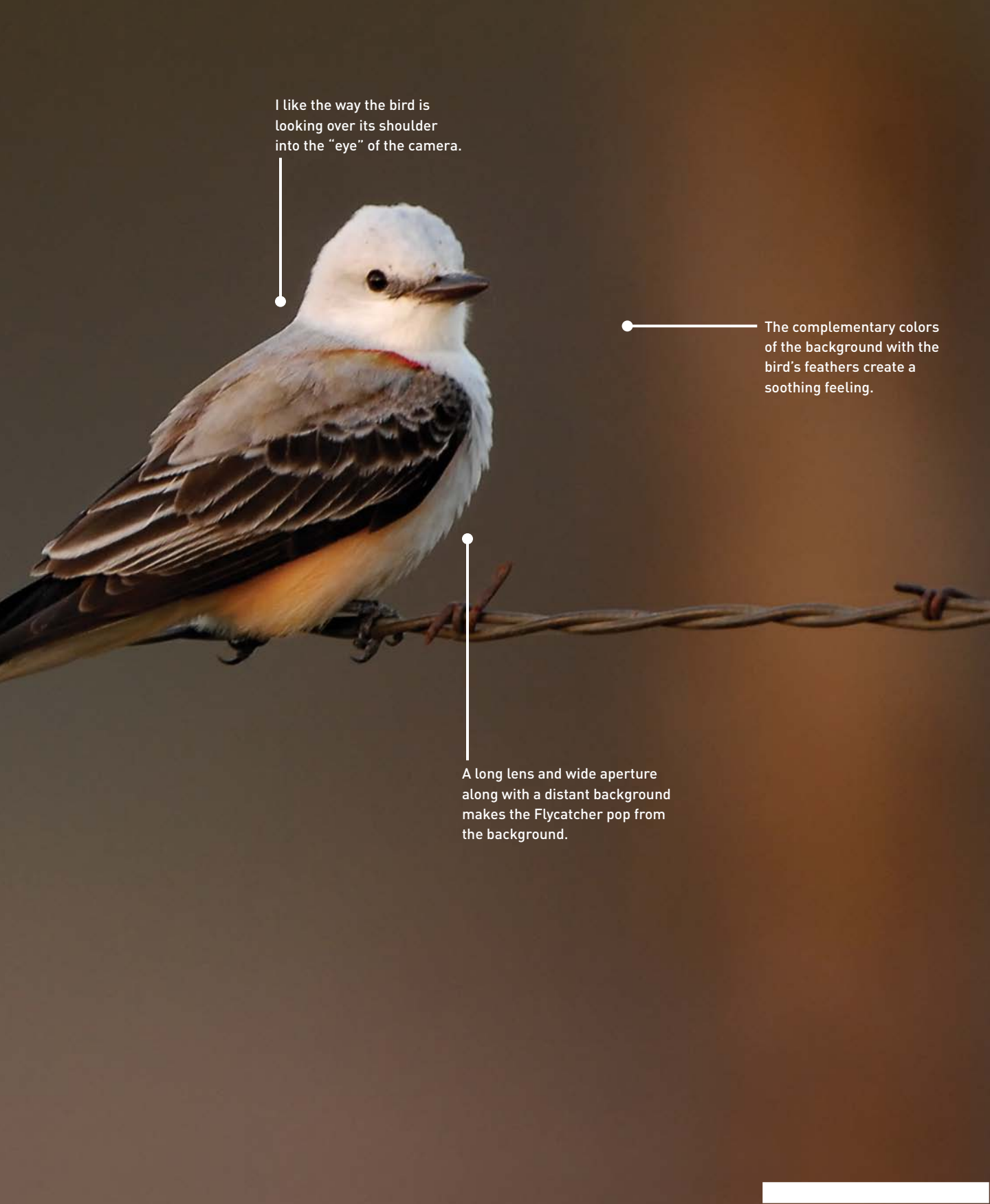

I like the way the bird is looking over its shoulder into the “eye” of the camera.
The complementary colors of the background with the bird’s feathers create a soothing feeling.
A long lens and wide aperture along with a distant background makes the Flycatcher pop from the background.

FIGURE 10.1
The 600mm f4 VR is my lens of choice when it comes to photographing birds.

FIGURE 10.2
Adding a 1.7X teleconverter to my 600mm gave me 1000mm, increasing the size of the Painted Bunting in the frame.

WHAT (EQUIPMENT), WHEN, AND HOW

I already know the what (birds) and where (South Texas ranches) my next adventure will lead me to, so I then have to figure out the best time (the hotter, the better) to go, how I will get there (small commuter plane to McAllen, Texas), and what equipment (**Figure 10.1**) I will need and how to get it there.

WHAT EQUIPMENT

When it comes to bird photography, I pull no punches and go straight to my 600mm along with all three teleconverters. Small birds take all the reach you can get (**Figure 10.2**). In South Texas photographing from blinds, I also have my extension tubes close at hand. The rest of my gear is pretty much the same as in Chapter 9, "Bear Tales," with the following changes:

- Nikon AF-S 70–200mm 2.8 VR II in place of the 70–300mm VR for the increased speed and the ability to add teleconverters reaching to 400mm with the 2X.
- Gitzo GT5541LS in place of the GT3541LS due to the increased weight of my 600mm lens.
- Lightning Trigger; hey, it could (and has) happened!

WHAT CLOTHING AND GEAR

On location, it's hot, it's muggy, it's prickly, and it's buggy! Oh, yeah, and you're in a blind (box) with very little ventilation. I don't want to scare you away; I just want to warn you to dress accordingly by wearing lightweight clothing that wicks away moisture and closed-toed shoes to avoid stubbing your toe into a cactus. Here are the items you should have with you:

- Shorts and T-shirts rather than thermal underwear and fleece, and well, nearly everything else on the list in Chapter 9. You will live in shorts and T-shirts!
- Sunglasses, hat, sunscreen, and bug spray are on the list in Chapter 9, but I want to place special emphasis on these items. You will definitely need them.
- Snakebite kit. You think I'm kidding (**Figure 10.3**)? Seriously, while on the lookout for snakes to avoid getting bitten, we also watch out for them as additional photo opportunities.

FIGURE 10.3
They grow things big in Texas, and snakes are no exception. This guy was at least six feet long.

WHEN

There are birds in South Texas all year round; but for the *best* bird photography, prime time is spring through early summer. It's nesting season, it's migration time (midway through the season), it's hot, and the birds flock to the rare and essential water sources (where the blinds are strategically placed) to drink and bathe (**Figure 10.4**). The last week in May is my preferred time to be there, but I'm told it's even "hotter" (the photography and the temps) in June. I've been meaning to give it a go some year. Spring also brings with it mating and nesting behavior among the birds. So you always need to be on constant watch for a bird carrying nesting material or exhibiting mating behavior for interesting photographs (**Figure 10.5**).

FIGURE 10.4
When it's hot out, place yourself at a water source; the birds will come.

FIGURE 10.5
Northern Mockingbird calling to its mate.

HOW

Two planes from Portland, Oregon, to McAllen, Texas, covering over 2,100 miles and 8-½ hours of travel time, put me in South Texas. An hour's drive gets me to the lodge, where I'll make my base for the next week. The itinerary consists of two shoots daily, beginning with a quick continental breakfast before heading out to the blinds, setting up, and being in place before sunrise. Once situated in the blinds, I won't leave for several hours, so it's important to pace myself on my fluid intake. If I leave the blind, I flush the birds. It's as plain and simple as that. So, upon my arrival, I quietly wait for them to resume their activity that I interrupted. And resume it does, as one species of bird (**Figure 10.6**) after another comes to the water, allowing me to train my lens on them long enough for a few photographs before the next subject (**Figure 10.7**) takes its place.

FIGURE 10.6
A Great Kiskadee perches before going to the water. The key to great shots is the strategic placement of and types of perches.

FIGURE 10.7
A Golden-fronted Woodpecker calls to its mate in a nearby tree.

When the sun gets high in the sky throwing hard shadows against the bright dirt and the temperature starts its upward climb, I too climb out of the blind and head back to the air-conditioned lodge. I'll upload the morning's images, have lunch, and take a break during the hottest hours before heading back to a different blind that is situated for afternoon light for another 3-to-4-hour session of bird photography (**Figure 10.8**).

Blinds are placed for either morning or evening light. I enjoy several afternoons at the raptor blinds photographing the Harris Hawk (**Figure 10.9**) and the rare Cara Cara (**Figure 10.10**) vying for position to get the prize of a meal of raw meat.

Photographing the birds of South Texas is just like shooting fish in a barrel. You simply go to the water source on a hot spring or summer day and tuck yourself into a blind for a few hours of enjoyable wild-bird photography.

FIGURE 10.8
A Green Jay is one of my target birds when photographing in South Texas. It is not common in many other locations.

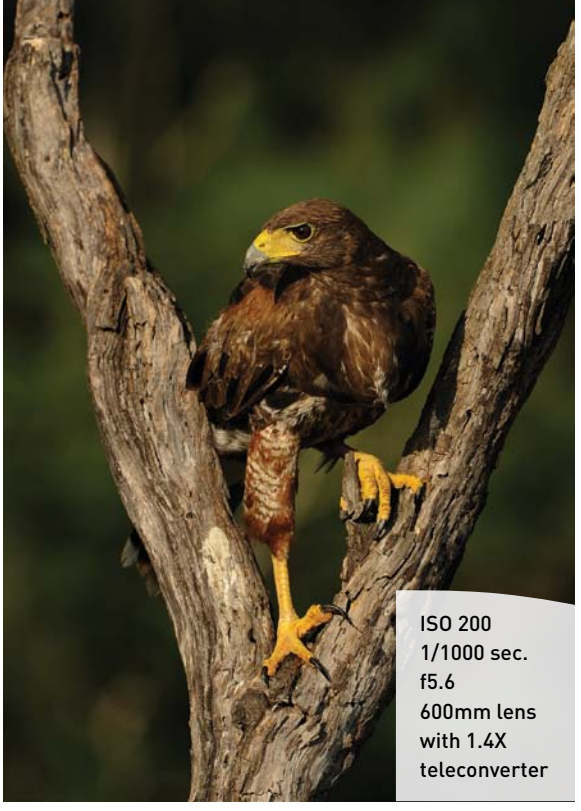
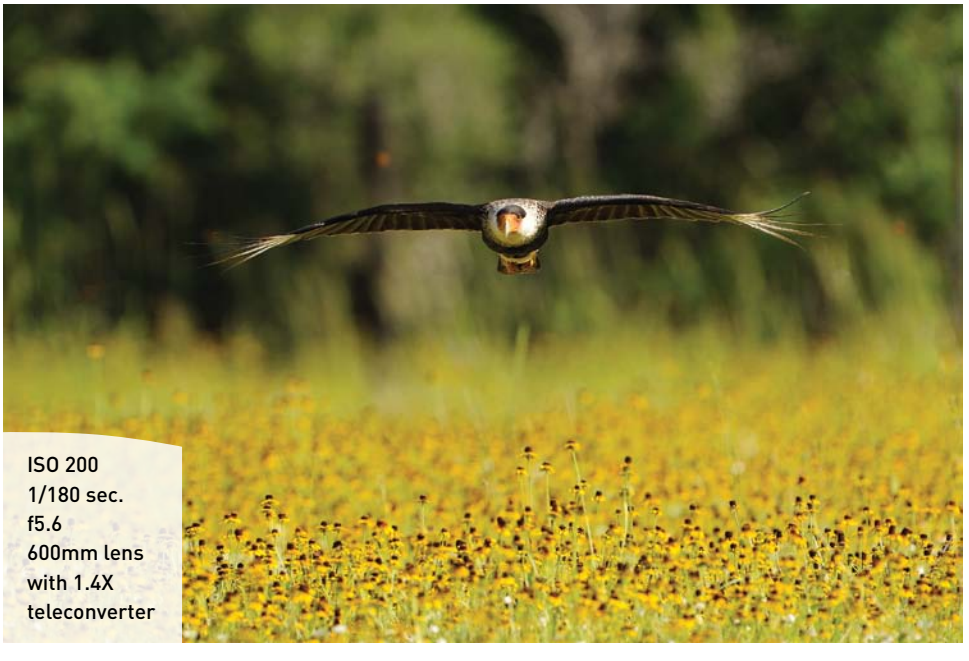


FIGURE 10.9
A Harris Hawk perches in the crook of a tree checking the area for danger before going to the bait.

FIGURE 10.10
A Cara Cara flies low over the fields of yellow flowers that spring rains have nourished.



Chapter Assignments

Bird photography can be fun and rewarding. Unlike a lot of wildlife photography, you don't even need to travel far to find birds to photograph. Complete the following assignments and you can begin making great shots of birds right in your own backyard.

Backyard Birds: If You Build It

Set up a bird feeder or two, or a water feature in your backyard. Keep the feeder filled with the appropriate seed for the birds that come to your backyard and fresh water for drinking and bathing. Create your own little backyard bird oasis.

Backyard Birds: Observe

Every chance you get, observe the activity that your attractions have created. Try to make note of what times of day are the most active. Where do the birds land before they make the final flight to the food or water? What is the background like? Are there some natural, photogenic perches that the birds land on? What can you do to make the area more photogenic?

Backyard Birds: Blind Photography

Set up a blind near the water/food source. The blind can be a hedge or other type of bush that blocks you (mostly) from the birds' view and allows you to capture their comings and goings. The blind can be anything from a pup tent to an official camo blind used for hunting or bird watching; it just needs to block you from the birds' view. Leave it up for a few days to let the birds get used to it. Next, gather up your longest lens, your tripod, a comfortable chair, and all the necessary things you will need for a few hours. Then hang out to see what comes to your feeder or bird bath.

Share your results with the book's Flickr group!

Join the group here: flickr.com/groups/wildlifephotographyfromsnapshotstogreatshots.

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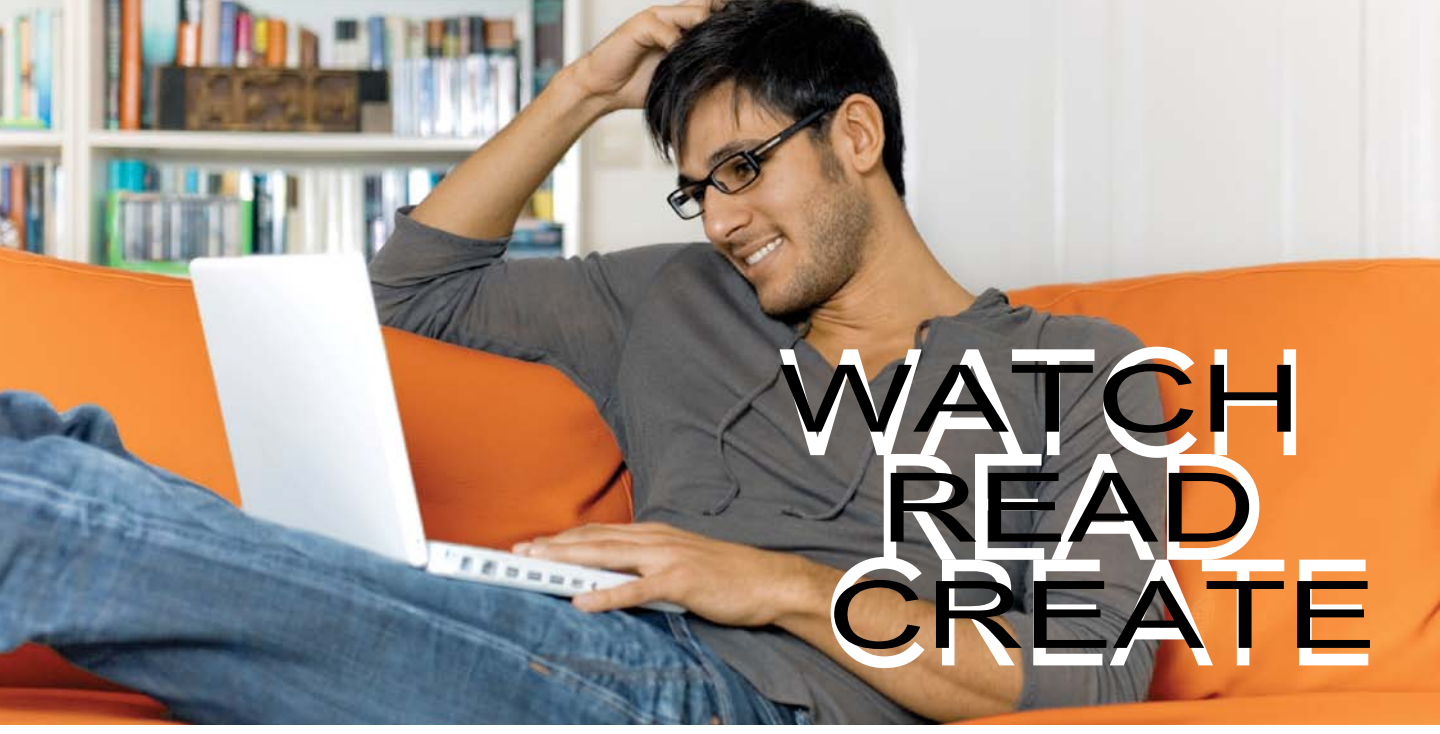

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